

THE 710 ISSUE

HIGH TIMES

JULY 558



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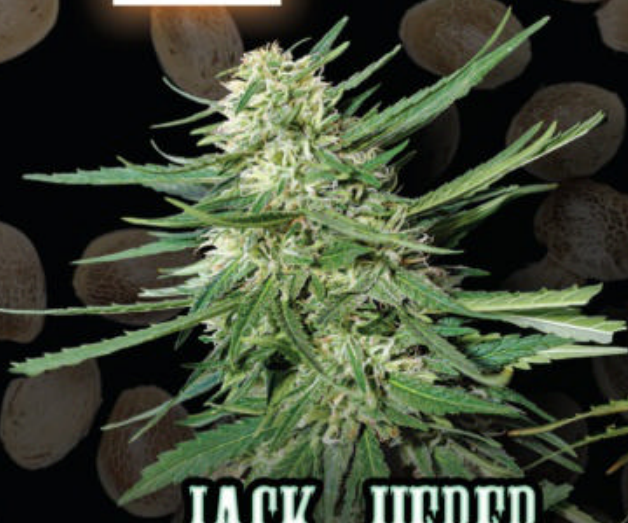
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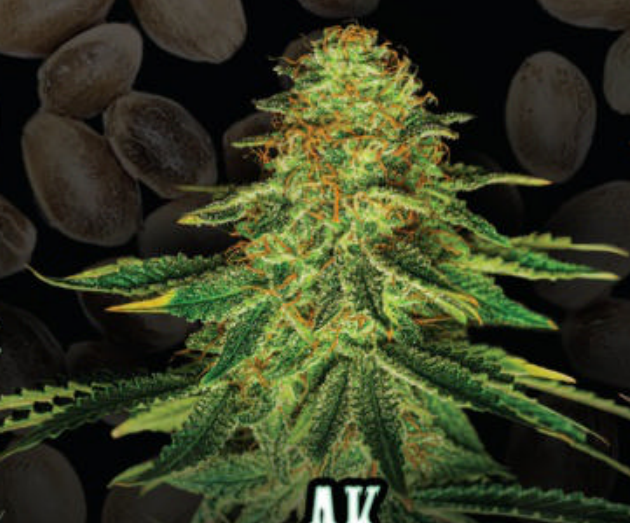
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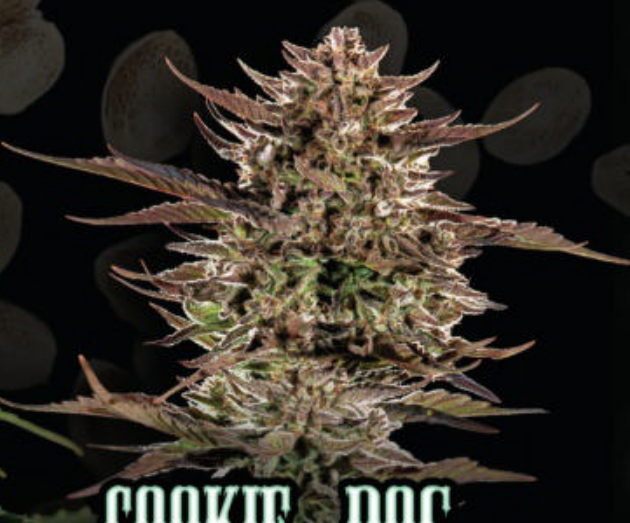
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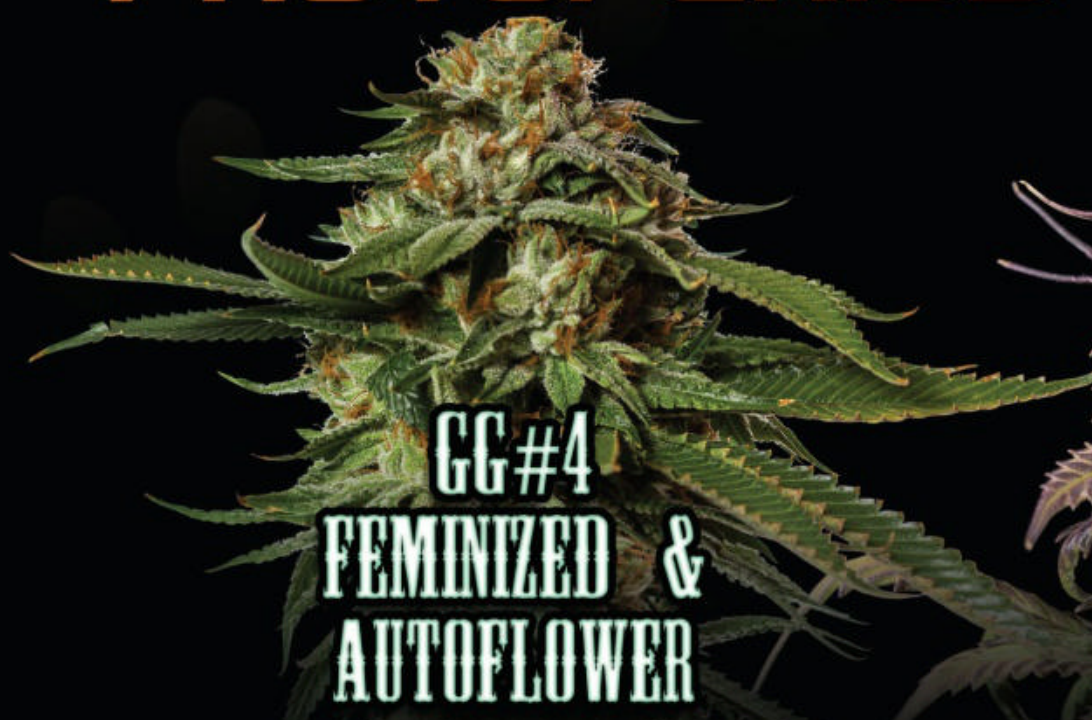


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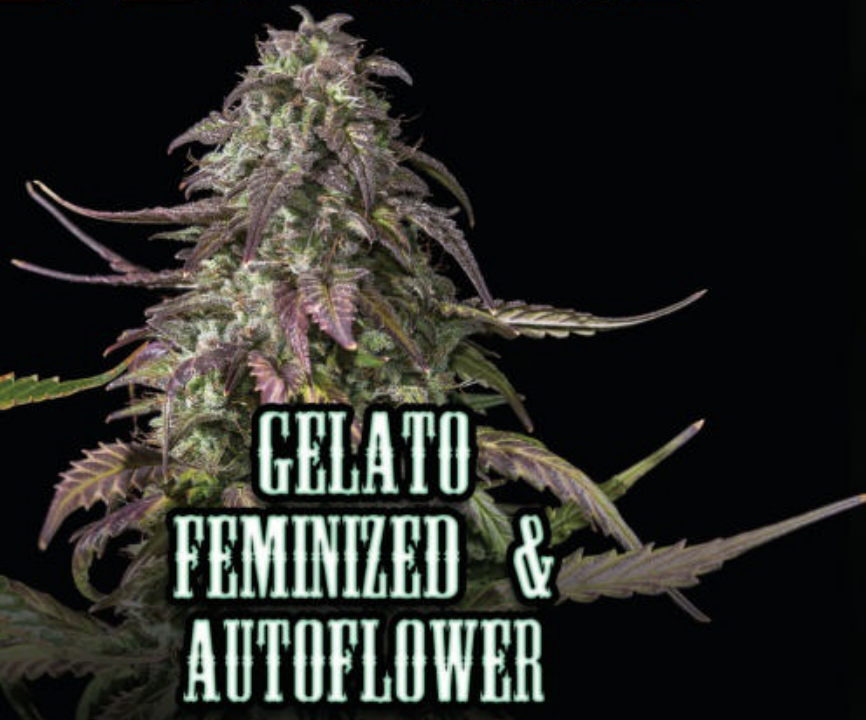


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ON THE COVER



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Exploring Northern California's Cannabis Corridor

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Nikka T has many accomplishments. Coining the term "solventless" and winning numerous cannabis awards with his company, Essential Extracts, are just a few. He is renowned for producing quality concentrates, and in this exclusive interview, he shares inside tips on identifying which strains are best for making ice water hash.

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seek refuge living in space pods on the Martian surface, cannabis will come with us, and we'll still be looking for ways to make it stronger.

In our 710 issue, we're exploring some of the most flavorful and potent experiences pot can produce. Staff writer Benjamin M. Adams addresses the two most essential components of a cannabis concentrate, THC and terpenes. Jimi Devine pulls in the world-class concentrate artisan at Royal Key to explore the journey to the top of the terp pinnacle and the struggles of surviving in today's marijuana marketplace. And Nicole Potter jumps in the rosin ring with one of our most cherished solventless artisans, Nikka T.

Cannabis legend Ed Rosenthal shows us how to make one of the easiest cannabis concentrates, dry ice kief, through step-by-step instructions. And Kyle Eustice is Zoomin' with Paul Wall to discuss his weed smoking history and medicinal use of cannabis alongside his most recent musical collaborator, Termanology.

We here at *High Times* hope you have a most wonderful 710. Humanity needs more reasons to celebrate together, and we all deserve an escape from the heavy stressors of modern life. Those on the other side of the War on Drugs are still trying to convince the world of the dangerous effects of potent pot. Still, despite the opposition, we all know that enjoying cannabis is one of the safest and most natural ways to add color and flavor to our lives. 🍪

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HAPPY 710!

The cannabis community has an affinity for numerology. Following our most celebrated and widely known marijuana holiday, 420, is a day focused solely on cannabis concentrates, 710. Observed on July 10, 710 is a time to honor how concentrating the cannabis plant's essence raises THC levels and gets us mega high.

The first cannabis concentrate was most likely charas, as people discovered that the sticky substance left on their hands after rubbing the plant's leaves and buds was loaded with resinous material that produced those feel-good feelings. After that, traditional concentrates such as ice water hash and dry sift took us to ethereal planes. Recent times have brought about a resin renaissance, as the ways to extract the plant's cannabinoids and terpenes have grown more sophisticated. The ways we consume cannabis concentrates have also evolved immensely. If we continue to destroy the Earth and are forced to

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The *High Times* editors received a message over Instagram that read, “We believe that 420 people are the most united in the world; now is the time to prove it.” Here’s the letter we received from a 420-friendly shop in Ukraine:

Hello Dears,

My name is Oleksandr Polishchuk and I am the owner of the Ukrainian brand Culture Club (КК Культурний Клуб). I am writing this message to those who believe in the 420 lifestyle and am asking for help. We are a young couple (25 and 29 years old), and we created this 420 brand (Culture Club) in 2015 in Kyiv, Ukraine. Since then, we have become very popular in Ukraine and post-soviet countries, created a community of 420-friendly people, and taught Ukrainians how to make the 420 lifestyle more cultured and esthetic. We are unique over here and we do everything for the fun and comfort of our clients. I am filming informative and fun videos. My wife creates art and makes professional photos! Everyone in our team (five of us) work on the quality of our brand and the quality of the 420 life of our clients. We have two shops: one in Kyiv and one in Lviv (a beautiful city in western Ukraine).

Just to remind you: weed is illegal in Ukraine. Even CBD is illegal for now.

“We made this art long ago, before the war and before Volodymyr Zelenskyy became so popular all over the world. As you may know, medical cannabis is illegal in Ukraine as well as in all post-Soviet countries. When we had an election in 2020, Zelenskyy did a survey with five questions to our people, and one of them was about medical cannabis legalization. That’s why we created this art and used it as a certificate for 420 Ukrainian hryvnias in our shop because we still believe that legalization may happen while he is president.”

Ukraine is the territory where people first lived 25,000 years ago. This is the territory of ancient Kievan Rus (the city of Kyiv was founded in that region in 482 C.E.). During all this time, Ukrainians were fighting for their right to be independent and finally did it in 1991 when Ukraine became independent from the Soviets. Since then, we have made big progress, and citizens are happy to live here now!

As you may already know, on the 24th of February, Russian soldiers entered Ukraine and started the war to conquer our country. Now it’s a very hard time here, but we fight. There are lots of people here who decided to take weapons to fight for their country, and those who can’t do that started volunteering and helping each other.

It was hard times last month [in March]. We finally took our cities in the Kyiv area back. We saw what they have done in Bucha and other cities there. We are winning, but some of our cities are still under constant attack by Russians; we believe we will take them back soon. Thousands of thousands of people don’t have their homes anymore, and thousands of children are struggling as well.

We are very thankful for all the help we have from other countries, and we know that everyone is with us. The world has united to help Ukraine!

We know that Russia uses propaganda and fake information to fool their people and tries to fool the world, but we see what is happening right now from here. Believe me, it’s a horror.

You can purchase NFT art at opensea.io/OKSI420. For those who want to help using PayPal, you can use my email o.o.420@icloud.com to send the funds. Please let me know your contact details so I can mention you as a helping hand.

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Zimbabwe Tobacco Industry Considers Switch to Cannabis

In Zimbabwe, tobacco exports brought the country \$794 million in revenue in 2020, down from a high of \$927 million in 2016. Tobacco is the country's third most valuable export crop after gold and nickel matte. The industry faces challenges brought about by COVID-19, a drought and a shift in production heading for South Africa. However, authorities are already planning for cannabis to be the country's largest cash crop with earnings well over a billion dollars within the next five years. Last year, the country exported 30 tons of industrial hemp to Switzerland with another 20 tons due to be exported this year. Tobacco farmers are now being encouraged to switch to cannabis. The hope is that at least a quarter of their income will be derived from cannabis sales in the next three years. As of April 7, 57 companies have received their licenses from the Zimbabwean government to grow cannabis, generating a great deal of excitement about the shift from tobacco to cannabis.



Read more at [HighTimes.com](https://www.hightimes.com)



Montana Adult-Use Sales Top \$43 Million

Montana's adult-use market is being considered a moderate success early on. As recorded during the first quarter of 2022, the new adult-use cannabis program in Montana has generated tens of millions of dollars in sales, netting \$8.7 million in tax revenue. The data was provided by the state's Department of Revenue, which detailed recreational pot sales in the state for the first quarter of the year. In total, the adult-use market that launched at the start of 2022 has produced \$43,537,110.29 in sales. In comparison, the state's medical cannabis program generated \$29,373,731.81 worth of sales during the same time period. Montana voters legalized recreational cannabis for adults during the 2020 election, one of four states to end pot prohibition on the ballot that year (Arizona, South Dakota, and New Jersey were the other three). Getting the program ready in time for the start of this year was a challenge. Officials in the state didn't propose their final rules to govern the newly regulated cannabis marketplace until October 2021, leaving the Department of Revenue very little time to iron out all the regulations.

Read more at [HighTimes.com](https://www.hightimes.com)

On Instagram

With a name like Garlic Sunset, one can only wonder about the treasure trove of odor-emanating and flavorful terpenes waiting to be discovered in this flower. Posted on our weekly hashtag [#WeedWednesday](https://www.instagram.com/hashtag/weedwednesday), this Garlic Sunset phenotype is the result of a cross between Cali Sunset x GMO. It was lovingly captured by [@stinkbud](https://www.instagram.com/stinkbud). This lady was hunted down and grown by [@gudgardens](https://www.instagram.com/gudgardens) and bred by [@enbynetix](https://www.instagram.com/enbynetix). Not to be confused with other cultivars of the same name or Garlic Kush, be sure to put Garlic Sunset on your bucket list of phenotypes to check out. If it looks anything like this deep violet beauty, we want to try it!



Tweet your best high observations and comments our way ([@HIGH_TIMES_Mag](https://twitter.com/HIGH_TIMES_Mag)) for a chance to be featured on this page! And be sure to follow us on Facebook: ([Facebook.com/HighTimesMag](https://www.facebook.com/HighTimesMag)) and Instagram: ([@hightimesmagazine](https://www.instagram.com/hightimesmagazine)) for all the latest news as it's happening!

Twitter Sidebar

[@MarchUkraine](https://twitter.com/MarchUkraine) Replying to [@PodemosCanabico](https://twitter.com/PodemosCanabico) [@fp_nandosamada](https://twitter.com/fp_nandosamada) and [@HIGH_TIMES_Mag](https://twitter.com/HIGH_TIMES_Mag) Thanks for solidarity! It really means a lot for us! And be sure we will win the war with Russia and will win the war on cannabis!

[@PodemosCanabico](https://twitter.com/PodemosCanabico)

Replying to [@MarchUkraine](https://twitter.com/MarchUkraine) [@fp_nandosamada](https://twitter.com/fp_nandosamada) and [@HIGH_TIMES_Mag](https://twitter.com/HIGH_TIMES_Mag) We need to stop all the wars, the war on [Ukraine] and the war on drugs.

[@thekoolhempsta](https://twitter.com/thekoolhempsta) Replying to [@HIGH_TIMES_Mag](https://twitter.com/HIGH_TIMES_Mag)

We need a High Times Cannabis Cup in NY, NY so bad!

[@XYZ_AMS](https://twitter.com/XYZ_AMS) Can't wait to attend the first High Times Cannabis Cup Expo in the Metaverse.

[@Georgia_CBD](https://twitter.com/Georgia_CBD) In Georgia, it seems as if [#meth](https://twitter.com/meth), addictive [#prescriptiondrugs](https://twitter.com/prescriptiondrugs) and unnaturally manufactured drugs are accepted medical care. Shame. Georgia Medical Cannabis Bill Dies in State Senate via [@high_times_mag](https://twitter.com/high_times_mag)

[@SOg303](https://twitter.com/SOg303) Replying to [@HIGH_TIMES_Mag](https://twitter.com/HIGH_TIMES_Mag) Yeah AL has some ass backwards laws/ All humans have an [#EndocannabinoidSystem](https://twitter.com/EndocannabinoidSystem) There Cannabinoids in mother's milk and during the whole process of childbirth.

[@theFOWLISHHOUND](https://twitter.com/theFOWLISHHOUND)

Time to get up, stretch, listen to some Nina Simone, and DAB, baby! High, [#StonerFam](https://twitter.com/StonerFam)... Have a great day! Stay elevated. [#420community](https://twitter.com/420community) [#HighTimes](https://twitter.com/HighTimes) [#positivity](https://twitter.com/positivity)



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CONCENTRATE CONSUMPTION IS ON THE RISE

The popularity of **concentrates** and other forms of cannabis consumption rival traditional flower.

and find their niches. Most new consumers will not become heavy, multiple-times-daily cannabis users—they will more likely take up cannabis use weekly, monthly, or every few months. While they might consume less frequently, their comparative size means their total spending may eventually rival spending by the heaviest consumers, who make up a relatively small subset of all consumers.

As cannabis gains ever more mainstream acceptance and public accommodation, among the most popular product segments favored by consumers has been concentrates, or extracts. While they can be highly potent, and their consumption techniques somewhat complicated, public awareness about the health risks of smoking (whether tobacco or cannabis) have only added to concentrates' cache, with a wide variety of methods and equipment to consider. Meanwhile, expansive innovations among value-added products (especially infused products including edibles and beverages) will keep drawing consumers to non-combustion-based products.

While competitive forces and economies of scale should continue to drive down both wholesale and retail prices, continued growth in consumer demand will ensure sustained positive market growth through 2025. Furthermore, strong demand for value-added products (i.e., vapes, concentrates, edibles, and topicals) will expectedly buoy prices as those products have held their premium pricing better than flower.

Development of fast-acting ingestible formulations that can produce an effect within 10-15 minutes of ingestion will be highly appealing to consumers who want the rapid onset of flower or concentrate combustion, but do not

want to smoke, either due to health concerns or an inability to mask the odor of combusting flower. Fast-acting infused beverages, especially, represent a promising area of growth.

While many prolific consumers will continue to opt for the flower with the highest THC content, casual consumers will be more likely to select products based on a wider set of factors. Casual consumers may choose cannabis products by the flavors/ingredients in an edible or beverage, such as the presence of other cannabinoids like CBD or CBN, the intended effect or mood of the product ("chill", "sleep", etc.), the form factor (e.g., tiny "dogwalker" joints), or simply the product branding, as with most wine consumers' selection based on a label's design. >>

FOR DECADES, "GOOD COFFEE" MEANT STRONG COFFEE:

A simple, caffeinated, black cup of joe.

Today, many coffee drinkers' favorite cups include coffee, but often include whipped cream, chocolate, various sweeteners, and perhaps peppermint, pumpkin, vanilla, or additional flavoring. There are still the espresso and black Americano purists, but a coffee shop's offerings—and profits—are driven by a wide variety of forms, flavors, and ingredients built around a shot of espresso which bear little resemblance to the coffee of old.

The same expansion of flavor, form, and formulation that coffee has seen in the last few decades is starting to be replicated in cannabis. As legal markets expand and the cannabis consumer base broadens, product forms will continue to diversify

"As cannabis gains ever more mainstream acceptance and public accommodation, among the most popular product segments favored by consumers has been concentrates, or extracts."

- J.J. McCoy



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Titan SQ1

Strain:
Big League



Grown by
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Strain:
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Considering that even identical clones grown in different conditions will yield flower with varied chemical profiles, it is critical to understand how minor variances in a plant's chemical profile can influence the effects experienced by the consumer. Further research will not only unlock considerable new opportunities in the effect-based consumer product environment, but also enable greater customization of the formulations to individualize consumers' unique endocannabinoid profiles.

The pandemic marked the shift of some consumer behaviors, including an increased demand for flower, decreasing consumers' sharing of joints and other inhalables, increasing demand for non-combustibles (especially for consumers living in situations where smoking is not an option), and increasing use of delivery and curbside pick-up. As the pandemic extends into a third year, consumer behaviors are becoming increasingly normalized, making it unlikely that once the pandemic ends, they will fully return to their pre-pandemic behaviors.

Consumer education will be an increasingly important part of brand development in 2022, as new consumers will need guidance on how to optimize their experience amid the proliferation of new product forms and ingredients. As the cannabis consumer base broadens and acceptance increases, the companies that most effectively appeal

to the diversifying consumer base will be well positioned this year and beyond. That said, while the primacy of flower is increasingly rivaled by vapes, concentrates, and edibles, New Frontier Data projects flower to remain the foreseeable preferred ingestion option among consumers.

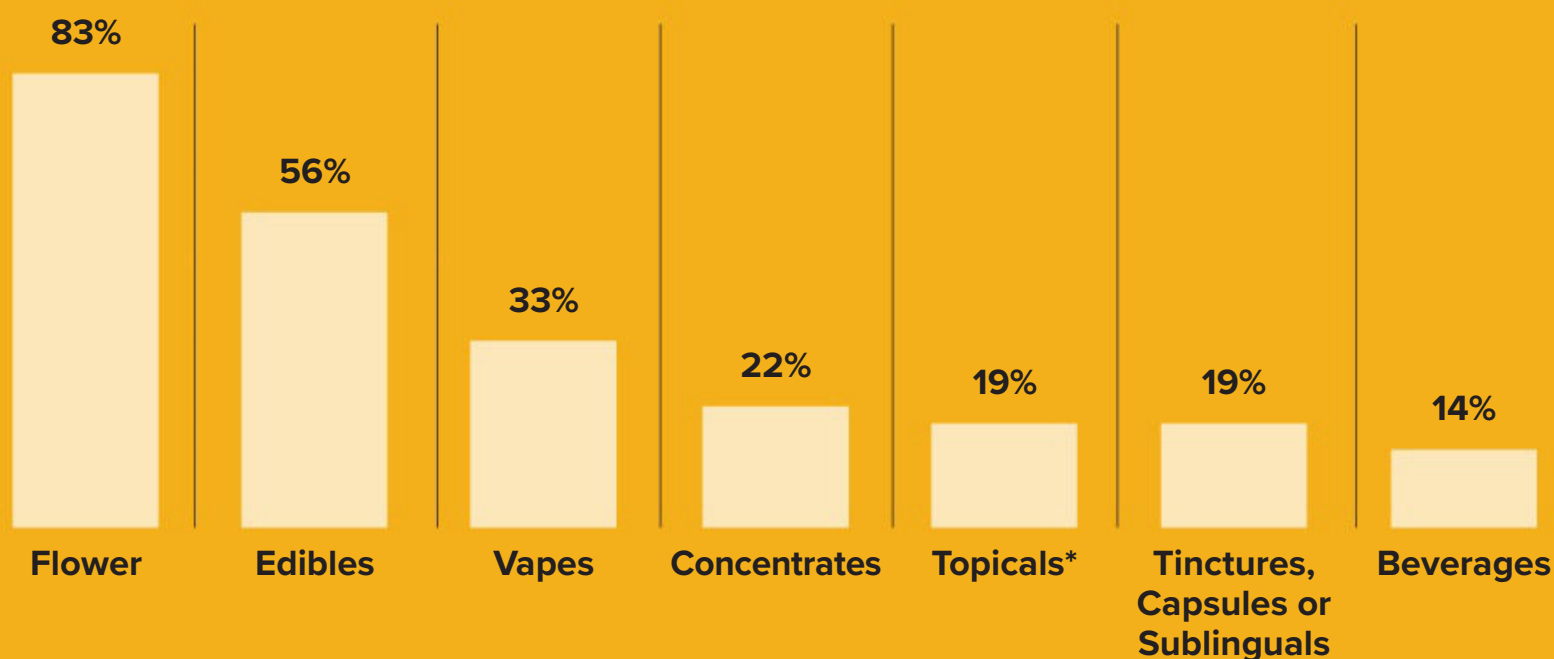
Changes in consumer preferences are having major impacts on the supply chain, from a dramatic swing in demand from flower to extract-based products over the past few years, to increasingly nuanced ways in which consumers integrate cannabis to their lives. It is therefore vital that the companies closely monitor and adapt to the emerging and evolving consumer preferences, with continued innovation of cannabis products and services.

Product preferences and consumption habits have changed significantly since the first adult-use markets began. Not only have manufacturing advancements created novel infused products and more potent concentrates, but product innovation has increasingly allowed consumers to incorporate cannabis into their lives in new and novel ways. For example, the discretion afforded by vapes and edibles have made it possible for one to consume cannabis in a much broader range of contexts than would be possible with smoked cannabis products.

But there is still nothing quite like enjoying that favorite cup, however it is preferred. 



TOP PRODUCT FORMS



©2014-2022 New Frontier Data | Source: New Frontier Data 2022 Consumer Survey. Current (annual+) consumers. *Topicals includes transdermal patches

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FACT

Scientific studies show that smoking marijuana before sex leads to **stronger, harder** orgasms.



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RESPECT THE RESEARCH

Dr. Ethan Russo discusses the science of how medical cannabis can be an effective treatment for veterans.

DR. ETHAN RUSSO IS ONE OF THE WORLD'S LEADING EXPERTS ON MEDICAL CANNABIS. HE IS A BOARD-certified neurologist and psychopharmacology researcher with many unique medical positions held throughout his career, has authored several books about cannabis, cannabinoids, pharmacology, and rare botanicals, and has published over 30 articles covering neurology, pain management, cannabis, and ethnobotany.

Russo spent over 20 years as a clinical neurologist in Missoula, Montana, where a majority of his practice focused on the treatment of chronic pain. He was also the former senior medical advisor for GW Pharmaceuticals (now Jazz Pharmaceuticals), where he oversaw multiple Phase I-III clinical trials for medical cannabis drug Sativex, as well as initial studies for Epidolex, in the United Kingdom. He's also the founder and CEO of CReDO Science, which strives to commercialize cannabis products that are supported by research of cannabis and the endocannabinoids system.

Veterans want to know the science behind medical cannabis, especially how it can be useful to help treat conditions such as post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI). Russo is one of the most well-respected cannabis researchers in the world, and he spoke with *High Times* to discuss the science behind medical cannabis as a treatment.

Many veterans use cannabis to help manage their PTSD. How does it help?

Part of the brain's function is filtering out unnecessary or counter-productive memories so that a person can carry on and function optimally. In other words, it is just as important to be able to forget as it is to remember. Cannabis can be helpful in PTSD via three main mechanisms: 1) anti-anxiety effects from very low THC concentrations, and benefits from other components such as cannabidiol (CBD) and cannabigerol (CBG) and linalool, if available, 2) THC impairs short-term memory in a way that may prevent rumination on the thought, memory, or situation that was the source of the trigger, and 3) THC reduces rapid eye movement (REM) sleep and thus limits the likelihood of intrusive nightmares that are one of the hallmarks of PTSD.

Is cannabinoid hyperemesis syndrome (CHS) real?

Yes, cannabinoid hyperemesis syndrome (CHS) is absolutely real. It is a disorder characterized by severe nausea, vomiting, abdominal pain, and hot water bathing behavior that only occurs in a subset of susceptible individuals who are using high doses of THC on a chronic basis. Our team recently discovered five gene mutations that were statistically significantly different to those in high volume cannabis users that lack CHS symptoms. This work has led to the availability of a commercial CHS susceptibility test that can help assess whether someone has or might be likely to develop CHS.

The reason that you may not have encountered veterans with CHS is simple. Generally speaking, people using cannabis medically will use only enough to control symptoms, not so much as to cause high level intoxication. People with CHS tend to use very high amounts, cannot easily stop despite cannabis making them sick, and would be categorized most often as "recreational" users rather than those treating symptoms therapeutically. >>

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About Us

Yellow Brick Group is a creative agency that works to effectively communicate the story of your brand, product, or project to your audience. Whether that story is told through product packaging, your website, logo suite, photography, or videography, our team strategizes to craft the most effective solution from conception to execution. Building strong foundations and developing systems for continued excellence is our bread and butter.

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ETHAN RUSSO AND PATRICK SEIFERT POSE FOR A PHOTO TOGETHER AT AN AMERICANS FOR SAFE ACCESS EVENT IN MAY 2018.

“Cannabis is an herbal medicine and does not belong in a schedule based on the Controlled Substances Act of 1970. Prohibition does not work.”

-Ethan Russo

A lot of bad advice on CHS has been evident from doctors and others who are not well versed in the available science behind the diagnosis.

What advice would you give veterans looking to use medical cannabis to aid suffering associated from a traumatic brain injury (TBI) from a battlefield improvised explosive device (IED)?

This is a very complex issue. Whereas such blast injuries are distinct in some respects from other forms of traumatic brain injury, there are many areas of overlap. It is abundantly clear that THC, CBD, and possibly other cannabis components are neuroprotective and can not only allay symptoms of headache, nausea, anxiety, etc., but also may promote healing and subsequent deterioration.

The key to treating TBI symptoms with cannabis is to use extremely low doses of THC, just enough to reduce symptoms, but not enough to cause side effects. Having adjunctive CBD, CBG, linalool, limonene, alpha-pinene, and beta-caryophyllene aboard can greatly increase the therapeutic index of the medicine and effectively help with other aspects of the disorder.

What would proper cannabis scheduling under federal law mean to you as a doctor, scientist, and researcher in the United States?

Cannabis is an herbal medicine and does not belong in a schedule based on the Controlled Substances Act of 1970. Prohibition does not work. Aside from Schedule I forbidden substances (all of which actually do have medical applications—e.g., when you have a heart attack on the street in England, you will likely be administered Diamorph, aka diacetyl morphine, aka heroin), the other schedules are designed for FDA-approved drugs, not cannabis.

Anyone who has tried Marinol (synthetic THC) and herbal cannabis knows that there is a world of difference between the two. An appropriate analogy is that drinking pure ethanol tells you nothing

of the taste and effect of a fine vintage wine. Putting cannabis in another schedule category would only serve to provide fewer constraints on licensure and storage requirements for research, but not actually encourage or promote its performance.

Properly speaking, there are three echelons of cannabis commerce: 1) herbal cannabis, which, aside from home-grown material, should still require regulatory monitoring on contents, storage and recommendations for sale, 2) herbal extracts and supplements, which should be subject to tighter quality control, monitoring and reporting, and 3) FDA-approved pharmaceuticals, which meet the full criteria of safety, efficacy, and consistency as other prescription medicines. However, even FDA-approval does not ensure the need for a fourth factor, that of accessibility, particularly with respect to cost. A medicine is worthless if it is not available to those in need.

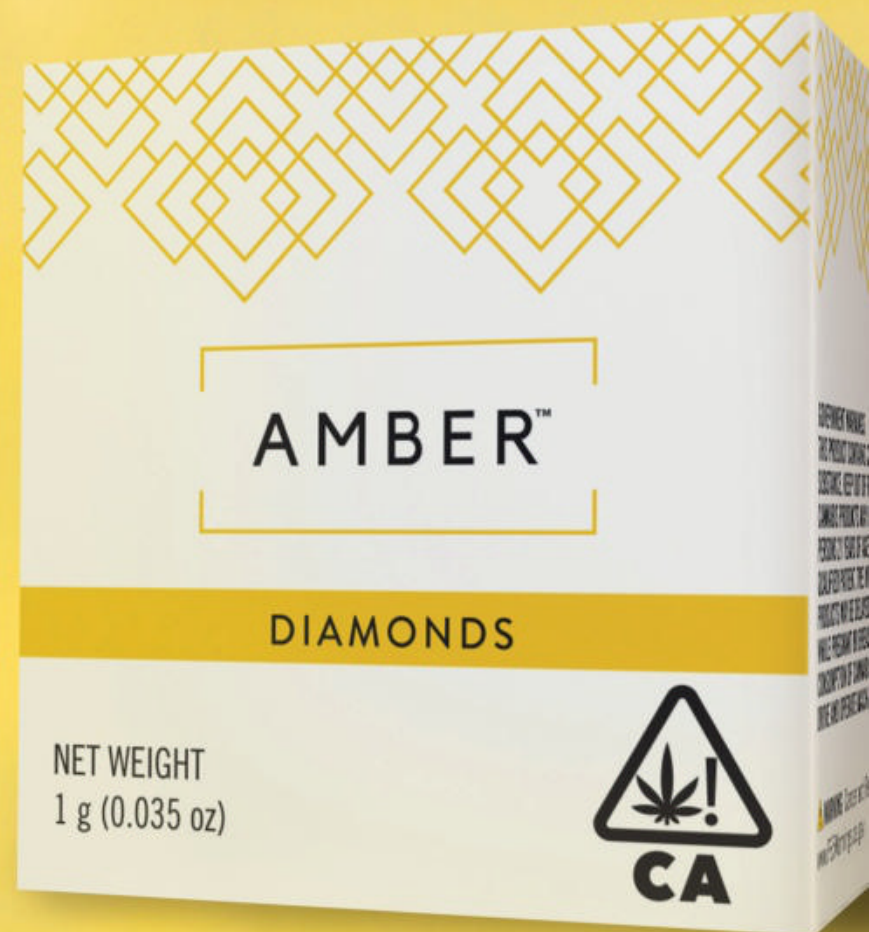
Do you believe you will see the end of cannabis prohibition in your lifetime?

I hope so, but I am old enough to remember well how we were close to cannabis decriminalization in the '70s only to have matters go astray and then totally off the rails and regress further in the Reagan administration. I believe that 2022 is a critical year. If gains are not made on this front this year, there is a strong likelihood that stagnation or retrogression will be the pattern for many years to come. **HT**

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MARKET ANALYSIS

As the second half of 2022 gets underway, pot prices dropped in all three regions, plunging the average cost of an ounce across America down to **\$307**. The Western market experienced the greatest decline **(\$17)**, dipping the cost of an ounce in the West to below the critical **\$300**-threshold, at **\$286**. The pricey strain Blue Dream rose from third place last month to lead the “Top 5” for July.

TOP 5 STRAINS

1	Blue Dream	4 @ \$384
2	Runtz	2 @ \$301
3	GG	2 @ \$298
4	OG Kush	2 @ \$190
5	Slurricane	2 @ \$115

WINNERS



↑	Abbvie Inc	NYSE: ABBV	\$168.91 (+5.48)
↑	Constellation Brands	NYSE: STZ	\$231.81 (+1.47)
↑	Altria Group Inc	NYSE: MO	\$53.83 (+1.19)
↑	Tilray Brands Inc	NAS: TLRY	\$7.25 (+0.22)
↑	Cara Therapeutics	NAS: CARA	\$12.73 (+0.10)

LOSERS



↓	Industrial Innovative Properties	NYSE: IIPR	\$194.48 (-6.69)
↓	Hydrofarm Holdings Group Inc	NAS: HYFM	\$13.82 (-0.73)
↓	Growgeneration Corp	NAS: GRWG	\$8.66 (-0.54)
↓	Canopy Growth Corp	NAS: CGC	\$7.18 (-0.21)
↓	Aurora Cannabis Inc	NAS: ACB	\$3.77 (-0.15)

HIGHEST 10 STATES

ALABAMA	\$550
Girl Scout Cookies	
NORTH CAROLINA	\$500
Blue Dream	
MISSOURI	\$452
Runtz	
NEW JERSEY	\$450
Mask Off	
NEVADA	\$445
Blue Dream	
NEW YORK	\$400
MediHaze	
PENNSYLVANIA	\$448
Memberberry	
OHIO	\$429
Cake It Easy	
MICHIGAN	\$424
313 OG	
ILLINOIS	\$400
Triangle Octane	

LOWEST 10 STATES

OKLAHOMA	\$100
Slurricane	
CALIFORNIA	\$130
Slurricane	
WASHINGTON	\$145
Strawberry Gas	
MAINE	\$150
Runtz	
OREGON	\$155
Black Triangle	
WISCONSIN	\$180
OG Kush	
FLORIDA	\$198
That Jawn	
GEORGIA	\$200
OG Kush	
RHODE ISLAND	\$214
Cold Snap	
ARIZONA	\$247
Dat Flava	



COMETS

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EXPLORING NORTHERN CALIFORNIA'S CANNABIS CORRIDOR

Emerald Farm Tours takes visitors into the heart of California's famed cannabis cultivation region for an inside look at the legal marijuana industry.

by A.J. Herrington

MARIJUANA LEGALIZATION HAS BROUGHT A WEALTH OF benefits, most importantly keeping thousands of people from being locked up behind bars every year. But beyond the obvious legal advantages, cannabis reform also gives marijuana enthusiasts and newbies alike the opportunity to deepen their appreciation for the plant.

Short of becoming a home grower, the easiest way to foster a more personal connection to the plant is to take a cannabis tour, which are popping up more and more as legal marijuana markets mature. Emerald Farm Tours in California has been giving folks an inside look at the famous Emerald Triangle growing region of Mendocino, Humboldt, and Trinity Counties since 2018, with guided visits to cultivation operations, dispensaries, and processing sites. Offerings have since grown to include the San Francisco Bay Area's contributions to the cannabis industry, with plans to expand tour opportunities at Sacramento-based legal marijuana businesses. Victor Pinho, co-founder and CEO of Emerald Farm Tours, says that the excursions give participants the opportunity to connect with the plant that so

many of them are looking for.

"All the people who come and take my tour want essentially one thing. They want plant time. They want time to interact with the plants, take photos of the plants, explore the side of cannabis that they may not understand or may not know about," Pinho says. "So it's almost like this mysterious world I'm pulling the curtain back on and giving them real true access to the industry, to the back-of-house goings-on of a cannabis farm and really, the beginnings of what brings their bag or jar of cannabis to them."

While nearly all of those who experience the tours are cannabis consumers, most have never seen a working cannabis farm or even a single live plant. Pinho says that the underlying common denominator motivating those on the trips is that people want a connection with living cannabis. When it happens, it can be a once-in-a-lifetime experience.

"That's exactly the kind of access we're providing," he says. "We're providing an experience that brings them to a place that, for reasons of prohibition, they've never been able to see or access. So that's exactly what they get excited about."

Of course, the tours aren't only about education and plant-hugging. All Emerald Farm Tours have opportunities to smoke out and get high, and guests are provided with a chance to mingle with like-minded visitors who often hail from all over the country and beyond. Pinho says that often enough, "it's folks in California who have friends or family coming from out of state, and they want to get into a really quintessential California experience. And so we provide that for them." >>



VICTOR PINHO DEMONSTRATES THE CORRECT WAY TO USE A ZONGI.



CHOOSE YOUR OWN DANK DESTINY

Emerald Farms Tours offers a variety of tour options to get an inside look at California's regulated cannabis industry. The Seed-to-Sale Cannabis Farm and Industry tour takes visitors to a working cannabis farm, a testing lab for a hands-on educational experience, and a retail lounge to enjoy some of the best weed in the world. The San Francisco Cannabis Crawl and Dispensary tour takes visitors on a guided walk of the City by the Bay, including stops at three of the most popular dispensaries. But the most popular tour, Pinho says, is the full-day Mendocino Wine and Weed Adventure. Starting in San Francisco, this tour takes visitors up the historic California 101 highway with scenic views of the Pacific coast.

“BY THE TIME YOU LEAVE MENDO, YOU’RE SPEAKING THE LINGO.”

-VICTOR PINHO



A stop at a winery gives guests a chance to unwind and stretch their legs while sampling the Golden State's other favorite buzz, wine. After enjoying a picnic lunch, it's off to a cannabis farm situated in California's famous redwood forest. Jason Matthys, the owner of Equilibrium Genetics, welcomes the guests to his operation, which includes 10,000 square feet of light deprivation cultivation hoop houses. A licensed cannabis nursery covering another 12,000 square feet encompasses Equilibrium's breeding and seed production operations. The site offers most visitors their first look into a side of marijuana culture they have never experienced before. >>



DERIVED
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An experience with every bite

Handcrafted edible infusions meet the High Times Hemp Cup of 2022!

Derived Creations is a small-batch handcrafted edibles manufacturer based in Fallston, Maryland, roughly 45 minutes north of Baltimore. Derived Creations, otherwise known as 'Derived', creates artisan recipes using simple ingredients and natural flavor extracts all infused with hemp-derived cannabinoids.

In the High Times Hemp Cup People's Choice Awards of 2022, Derived Creations submitted their Chewy Sea Salt Caramel recipe in the Delta-8 non-inhalable category. This recipe consists of seven ingredients, one of them being the hemp-derived delta-8

THC! This simple recipe and "no-fluff" approach to edible making allowed Derived Creations to take 1st place in the delta-8 non-inhalable category.

The team at Derived Creations says they owe this success to "all the small things they do to ensure the best quality product, time and time again." The 'small things' are simply quality control checks at every stage of production, which include small-batch cooking, hand-inspecting, hand-wrapping, and hand-packaging each caramel for a truly handcrafted experience.

The great care taken into each individual edible is what each team member

understands to be the main distinction in their product among others. This success exemplifies the care and attention to detail the whole team has and not just one person. Derived Creations is humbled to have not only been a part of such a competitive group of entries but to come out on top as the best product in the Delta-8 non-inhalable category in the **People's Choice Awards of 2022!**



"Thank you to the team at High Times and judges from around the country!"

Derived Creations





“A lot of these folks are coming out from prohibition states where they’re just not allowed to see anything like this,” Matthys says during a recent phone call. “And for some people, it’s a really special moment when they get to see the plant face-to-face.”

After a refreshment and a Q&A with Matthys and Pinho about the grow, the guests are off to The Bohemian Chemist, a cannabis dispensary in Mendocino County’s Anderson Valley. While there, visitors delve into sungrown cannabis from the region’s finest appellations, topping off an incredible hands-on excursion into the heart of California cannabis.

“By the time you leave Mendo, you’re speaking the lingo,” quips Pinho.

Of course, the tours offer the adventurers a chance to enjoy the fruits of the Emerald Triangle, with plenty of opportunities to imbibe in special finds picked up along the way. Pinho says there are also plenty of laughs with the visitors. He’s especially amused by those who make boastful claims that they can’t live up to.

“People tell me they’re professional edibles eaters, then they eat an edible and by an hour in, they’re asleep in the back of the bus.”

Beyond the laughs and wealth of information presented, Emerald Farm Tours provides visitors to California cannabis country with something more meaningful—a sense of community around a shared appreciation and love of the plant.

“We have such a wild time on these tours because part of the experience is bringing together different age groups, different walks of life, all on the scene,” Pinho explains. “They’re there for the cannabis, and cannabis becomes the essential focal point of the conversation and the hang, the communication, and the engagement. So it really is kind of a unifying factor for all of these different types of people that take our tour.” **HT**

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Kratom is a leafy plant native to Southeast Asia, namely Indonesia, Thailand, Malaysia and Bali, that's actually part of the coffee family. The leaves can be chewed (what Thai workers do to work long hours in the heat) but for the typical end user, kratom leaves are most commonly crushed and processed to form a fine powder. This powder can then be ingested on it's own, with juice or as a tea.



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Delta 8

Delta-8-THC is a minor cannabinoid, recently discovered in the cannabis plant. This cannabinoid occurs in dry flower concentrations of less than 1 percent. When THC is stored for some time, Delta-9 degrades to Delta-8-THC. This cannabinoid is not formed by the synthesis within the plant. The low abundance of this molecule makes it even more special as it does not get you high like THC. However, researchers and users suggest Delta-8-THC has numerous benefits for health and wellness.



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CANNABIS MEETS TRADITIONAL AGRICULTURE





RAW GARDEN
APPLIES THE
METHODOLOGY
OF TRADITIONAL
AGRICULTURAL
CROPS TO CRAFT
CANNABIS
CONCENTRATES.

BY ADDISON HERRON-WHEELER

The team at Raw Garden pride themselves on their process—growing cannabis flowers from seed and freezing the buds at peak ripeness to lock in the plant’s essence. Known for its affordable and widely available live resin products, the company is one of the frontrunners in California concentrates.

Based in Santa Barbara County, Raw Garden grows cannabis in wine country, something the brand leans into when it comes to the comparison between wine’s attention to flavor and aroma and their own. The company was founded in 2015, focusing on organic and sustainable cultivation methods.

“We are all either farmers by trade or had a relationship with the cannabis plant and the cannabis industry,” Product Director Khalid Al-Naser said. “So obviously, there is a big focus on cannabis, but with all that farming experience we have, it is hard not to look at adjacent agricultural products and crops and discover ways to create more efficient processes.”

Armed with a knowledge of traditional farming methods outside of cannabis, Raw Garden’s flowers are grown like an agricultural commodity with attention to quality.

“At Raw Garden, we’ve made it our mission to develop cannabis into a modern agricultural crop with a production model that takes advantage of decades of technological advancement in row crop farming,” the company’s website states. “Doing that has required a commitment to studying all of California’s specialty crops, including berries, lettuce, celery, tomatoes, squash, vines, citrus, nuts, and flowers.”

Much of Raw Garden’s flower is grown in hoop houses to fully take advantage of the lush region where the farm is located. The hoop house method is a hybrid growing style that combines indoor and outdoor growing techniques. Constructed from PVC tubing in most cases, the outdoor arch structures still allow natural light to reach the plants, but the translucent covering gives some protection and a level of light deprivation. Unlike greenhouse and indoor growing, this hybrid format still relies on the local climate for much of the input in the growing process.

“A big part of what we’re doing is engaging with the plant. We’re growing not only a large amount of cultivated material for manufacturing, but we also have one of the largest breeding programs with a range of planted material for breeding selections,” Al-Naser said. >>





THE HUNT FOR TERPS

From the seeds in its breeding program to the select strains and phenotypes, Raw Garden flowers—bound for a future as live resin or live sauce—are closely evaluated to ensure they are good enough to end up in the cryogenic freezing chamber. Like other quality cannabis companies, many of which come with a higher price point than Raw Garden products, the company only uses whole flower, not trim or shake, for its extracts.

Through the cryogenic freezing and live resin extraction process, Raw Garden then produces BHO-extracted live resin, live sauce, live resin diamonds, and vape pens. A recent addition is the release of their flowers in pre-rolled



LIVE RESIN



LIVE SAUCE



DIAMONDS



joints infused with live resin crushed diamonds.

Live resin is popular because of how the freezing process preserves the plant's terpenes. Throughout the freezing process, the goal is to retain all the aromatic compounds that can make all the difference between a gorgeous, full-bodied, terpene-rich extract or an inferior product.

"As soon as it comes out of the field, it goes in and is frozen quickly and then cold-stored until it's pulled out for extraction," said Al-Naser. "That allows us to lock in all of the volatile compounds that make up the aromatics and the future. It also allows us to capture the cannabinoids in the plant at their peak of freshness without any subsequent degradation. That's a really important step in the field-to-manufacturing pipeline. »





"A BIG PART OF WHAT WE'RE DOING IS ENGAGING WITH THE PLANT. WE'RE GROWING NOT ONLY A LARGE AMOUNT OF CULTIVATED MATERIAL FOR MANUFACTURING, BUT WE ALSO HAVE ONE OF THE LARGEST BREEDING PROGRAMS WITH A RANGE OF PLANTED MATERIAL FOR BREEDING SELECTIONS."

-KHALID AL-NASER





“We’re trying to minimize as much of the aroma loss as possible, and that’s how you get these really aromatic vape carts, all the terpenes in the live resin, so that it hits you with flavor as soon as the smoke comes up through the rig. We make live sauce, and then we take that product and refine it to make it more efficient in our vape carts and give it longevity.”

Al-Naser emphasizes that great quality input is a huge part of the success of their concentrates. As a vertically integrated company, Raw Garden can ensure only the best quality bud makes it into their final products. Their breeding program

also allows them to keep up with dabbers’ constant hunt for new flavors. In-house strains include Funk N Fire, Blackberry Cookies, and Rio de Fuego.

“Honestly, the assortment of flavors is probably my favorite part of dabbing,” Al-Naser said. “I really enjoy the heavier aromas, things like ‘gas,’ ‘funk,’ ‘berry,’ ‘skunk,’ and tropical notes.”

With all the focus on aromas and flavors, it’s no surprise that Raw Garden borrows the term “terroir” from their wine-growing neighbors to refer to the complete natural environment in which the cannabis is produced. >>

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“Generally, almost any cannabis is impacted by the people in the place where it’s grown,” Al-Naser explains. “It’s like any agricultural product—everybody’s growing it in the region, and they are based on the limitations of the environment. And when you grow outdoors, there is even more of an issue of negative or positive impact depending on how you plan your cultivation process, in that the plants really do want to thrive outside. That’s what landraces really represent: they’re a product that was grown outdoors in a place for a long amount of time by people who were making selections based on what they would like, but also what the environment would allow.”

Another major cornerstone for Raw Garden is the process—even if that process means growing cannabis to observe things like smell,

taste, and color, and running through many different phenos before choosing a strain that will yield the best concentrate products. The company utilizes something they call an “aroma training ground,” a large pot planted with different strains with distinct aromatics to help train new employees to understand the types of things they should be evaluating in the field.

All of this attention to detail, when combined with Raw Garden’s farming practices, has led to the company’s growth. For Al-Naser, it all goes back to a focus on the plant.

“All of this space is dedicated to research and development, which means it’s an investment in understanding the plant better,” he said. **HT**

 rawgarden.farm





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SIMPLY SOLVENTLESS

NIKKA T
TALKS ABOUT
SOLVENTLESS
EXTRACTION
AND WHAT
MAKES A
STRAIN
VIAABLE FOR
ICE WATER
HASH.

by Nicole Potter

Nikka T has created a lasting legacy in the realm of hash. After learning the techniques to craft ice water hash from the Dutch master who perfected the form, he went on to open the first licensed hash company in the U.S. He's won more than 15 Cannabis Cups, changed

the vernacular of how we talk about hash with the term "solventless," and is one of the most well-respected artists and teachers in the concentrate community.

Nicholas Tanem's journey towards becoming the hash master known as Nikka T includes experience judging cannabis competitions worldwide. He's a cannabis consultant and producer, and a reggae DJ. He founded his Colorado-based company, Essential Extracts, in 2009 and expanded to the California market in 2018. Alongside the Essential Extracts team, he has competed in numerous cannabis competitions, such as the country's first rosin-specific competition at Chalice in 2015 (he credits the help of a cultivator called "The Mile High Man, AKA Kenny" for that win.) Nikka T's numerous achievements are vast and serve as an extensive reference to the excellence of his product.

The 2018 *High Times* Visionary Award winner shared a wealth of information about his craft in a recent interview, including how he learned to collect trichomes with a hash legend, what it takes to know if a strain is cut out for concentrates, and what's in store for the future. »



"THE BIGGEST REASON THAT I'M A
PROONENT OF SOLVENTLESS IS I PREFER
THE FULL-BODIED HIGH THAT MULTIPLE
CANNABINOIDS AND TERPENES GIVE ME."

-NIKKA T

COOKIES AND CHEM
70-149U LIVE ICE
WATER HASH

MECHANICALLY SEPARATED HEADS
BY NIKKA T



LEARNING FROM THE MASTERS

Nikka T's reputation is a testament to his drive to strive for the best and his constant work to improve his craft.

He grew up in Northern California and was raised in a supportive and liberal family, which led to cannabis becoming a part of his life early on. When he was attending junior college, he realized that cannabis flower wasn't quite enough for him and discovered a love for hash—ice water hash in particular.

The cannabis flower is covered in resinous trichomes. These trichomes are also on the trim (leaves left behind when the flower is manicured). Cannabis extractors can collect trichomes in several different ways, and one of the oldest forms is through making traditional hash. There are two basic ways to make hash, dry sieve and water hash. Dry sieved hash is when you run the flowers over a metal grate to dislodge the trichomes. Water hash is created by mixing cannabis trim or flower in water and ice and gently stirring the mixture to knock off the trichomes. Once the trichomes have washed away from the plant material, they are collected and dried. Also known as water hash, ice hash, ice wax, and bubble hash, when hash melts away entirely without leaving any residue, it's considered the highest quality and called full melt.

In the late 1990s, Nikka T traveled to Northern California, specifically to Willits, California, where his uncle owned property and cultivated cannabis privately. His uncle and other neighboring farmers often discarded their trim in trash bags and left them on the side of the road—and he collected those trim-filled trash bags to make hash. Eventually, he even began to track when the trim bags were left out to try and gather them up when they were still fresh. Being a day or two late meant that the trim was likely moldy and unusable.

Nikka T's interest in making hash continued to drive him forward. He traveled abroad and embraced the teachings of Mila Jansen, a famous hash master out of Amsterdam widely known as the “hash queen.” Seeking out Jansen was all about improving his skill set and knowledge about his craft. Jansen is a pioneer in perfecting the form of modern-day water hash.

“I needed to learn more techniques. I needed

to hone in my skills. I needed to create a higher echelon for the products that I was producing. So Amsterdam was the place to travel to,” he said.

While there, he spent every day with Jansen, up to eight hours per day, constantly asking her questions.

“There wasn't a lot that was written down,” he said. “A lot of this was oral tradition. So I bugged Mila for that oral tradition, and she obliged, and she was very patient and humble and willing. She taught me a lot. I had already been making hash for a little bit, but she taught me some key techniques such as the rinsing technique, where I was able to go from partially melty hash to almost full melt hash every single time.”

FROM SOLVENT TO SOLVENTLESS

In the early 2000s, butane hash oil (BHO) extraction rose to widespread popularity. Initially, Nikka T planned to make this type of butane-extracted concentrate to share with his friends at his home in Boulder, Colorado, but he wasn't content just making the BHO—he needed to know more about what was in the product, too.

At the time, it wasn't easy to convince anyone

“I'M NOT AFRAID TO SAY THAT WE'RE CONSTANTLY LEARNING. SO, YOU KNOW, I'M NEVER GOING TO SAY MY PRODUCTS [ARE] THE BEST. I JUST WON'T. BECAUSE I THINK THAT IT'S STILL OUT THERE.”

—NIKKA T

to share their test results, but he found answers through an employee working at a coffeeshop in Amsterdam. It was the first place to share a certificate of analysis, and he was shocked by the results. He found isobutane, isopentane, various metals, and other things he'd never heard of within the BHO products.

PHOTO: NICK JOHNSON, @THEDANKONE42



NIKKA T INSIDE INDICO COLORADO'S GROW IN PUEBLO, COLORADO.

"You know, I've been a naturally eating, health-conscious individual all my life. So first and foremost, when I heard the concentrates were being made with hydrocarbon, I didn't think that it was the safest for consumption. I also didn't think it was the safest for our environment. I didn't think it was the safest for a production team to produce in a lab."

Nikka T estimates that sometime between 2009 and 2010, he coined the term "solventless." In the case of cannabis, solventless applies to concentrates where trichomes from plant material originate without the aid of solvents, such as butane.

A solvent is a substance that dissolves a solid (cannabis flowers or trim) into a liquid solution. When this is done to cannabis the residual solvent, often butane, a flammable hydrocarbon that easily transforms to liquified gas, must then be removed from the final product to be safe to dab. The temperature and speed at which this is done result in concentrates of different consistencies. Think of it like making candy. Boiling sugar at different temperatures can create crystalline rock candy or creamy caramel. Nikka T plays with the presentation of his solventless concentrates and makes them appear in various forms that are typically found on the solvent side of the street.

"So when the term earwax was popular, we made a solventless earwax. When shatter became popular, we made solventless shatter," he said. "When this wet batter type consistency became popular, I took it upon myself to try and recreate that wet batter consistency [and] color without the use of any chemical solvents. And that's kind of where it all erupted."

At the time, these innovations in terms of the form that traditional hash could take were still new to the community, and the idea that concentrates could be "solventless" was questioned.

"Initially, people were like, 'What is this? This isn't water hash. This isn't bubble hash. It doesn't look like butane, and water is a solvent. So what are you doing, kid?'" he said. "I had a lot of backlash. It took a little bit for people to catch on. I started explaining to people like, 'Listen, I'm using water merely as a vessel to carry or transport these mechanically separated trichome heads to their destination. I'm not using the water as a solvent.'"

The argument here is that traditional methods for separating the resin glands from the buds rely on physical agitation, while butane extraction dissolves the cannabinoids and terpenes within a puddle of liquid solvent that must still be removed. >>

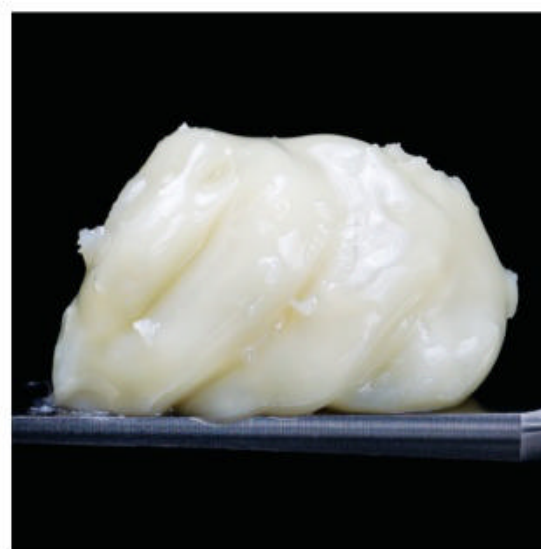
COCONUT COOLER LIVE
ROSIN GROWN BY
@GARRETTDUFFEY
PROCESSED BY NIKKA T

PHOTO: MITCHELL PETERSON, @EXTRACTSDAILY



NIKKA T SAMPLES
SOME PRODUCT.

“ONE OF THE FIRST THINGS I LOOK FOR IS THAT TERPENE CONTENT, OR THE SMELL OF THE PLANT ITSELF, THE SMELL OF THAT CULTIVAR, AND THAT’S REALLY IMPORTANT RIGHT NOW TO KIND OF WATCH THE MARKET AND SEE WHICH STYLE ‘SMELLS,’ IF YOU WILL, WHICH AROMAS ARE CAPTURING THE MARKET BECAUSE IT FLUCTUATES.”

THE SOLVENTLESS PREFERENCE

For Nikka T, there are two main reasons why he continues to embrace ice water hash. Firstly, the concerns of safety enjoying cannabis concentrates have been on his mind ever since he learned about the more harmful substances that make their way into concentrates through other methods. Secondly is

the fact that ice water hash is safer to produce than volatile methods of BHO extraction.

“On the lab side or the production side of things, the safety difference between solventless and hydrocarbon is vast, and I love that aspect of it,” he said. “Especially because I’m not only consulting for licensed facilities. I’m also consulting for the home producer, the home user that wants to learn how to make this themselves. So safety is a big issue and a big concern and kind of why I lean towards the solventless side of things.”

He also prefers the effects of a solventless product over one produced through butane extraction.

“The biggest reason that I’m a proponent of solventless is I prefer the full-bodied high that multiple cannabinoids and terpenes give me,” he said. “When I’m running hydrocarbon or utilizing butane, it seems to pull higher THC levels, but maybe not as much of that broad spectrum. Because as far as the high goes, I get way more of [an] all-over body high. It’s hitting all the points that I’m looking for it to hit when I’m consuming solventless, compared to when I’m consuming butane.”

HIGH-QUALITY HASH

One of the most common questions Nikka T is asked is what he looks for in a strain for making hash. For him, staying on top of the trends and newly emerging terpene profiles is one of the most important things to consider.

“One of the first things I look for is that terpene content, or the smell of the plant itself, the smell of that cultivar, and that’s really important right now to kind of watch the market and see which style ‘smells,’ if you will, which aromas are capturing the market because it fluctuates.”

Nikka T also has a few other key qualities that he looks for in a washer—a term used to describe an ideal strain for being washed in the ice water hash process. Strains with more area structure make it easier to remove trichomes during the washing process. Nikka T points to strains like GMO, Gorilla Glue #4, Kushman by JBeezy, or Key Lime Pie offering more viability in terms of yield and potency.

He also said three key points of a strain’s necessary tactile experience make it ideal for ice water hash. First, if a strain’s consistency is like sandpaper, sand between the fingers, or



HAN SOLO
BURGER LIVE
ROSIN

CULTIVATED BY
@KINDBILL AND PROCESSED
SOLVENTLESSLY
BY NIKKA T

tacky, they have the right texture for washing (such as Gorilla Glue #4). On the other hand, a strain that feels greasy, such as motor oil, isn't ideal for that purpose (such as OG Kush).

Nikka T looks for the right trichome structure that will provide an optimal yield.

"I'm looking for a structure in the trichome on that specific plant that has a very large, bulbous head and has a thinner stalk, but not too thin," he said. "If it got too thin, maybe that trichome falls off the material a little too easy, and it breaks plant material with it. If it's too thick, it wants to hold on to that plant material and that trichome doesn't want to be released for us to collect it. So you want to find a nice balance."

He also refers to cannabis plants with "weak neck traits," a term drawn from the professional pot photographer known as Shwale.

"He found that certain cultivars have what we call 'weak neck traits' where the stock of that trichome actually is pretty normally fixed, but then it gets real thin right before the head of the trichome, allowing us to mechanically remove that head without any of the stalk or plant material that much easier."

The final deciding factor that seals the deal is trichome density.

"So if you have all those things we discussed—you've got a nice gritty feel, you've got that big head with the weak neck trait, but there's only a few trichomes on that plant or in your

peripheral view—it's still not going to be viable and therefore not a washer. But if you have extreme trichome density with those other factors that I mentioned, I can almost guarantee that we'll have something viable. That's what we're looking for."

HASH TO THE FUTURE

With the pandemic subsiding, Nikka T has plans to travel more abroad this year. Most recently, he judged the Masters of Rosin competition in Barcelona, Spain, in March 2022 (which also happened to be the first rosin-specific competition in Europe).

Essential Extracts is also on the path to expansion in the U.S., with plans to launch in Missouri sometime this year and a few projects in Canada.

"I like constantly evolving and constantly creating better products," he said. "I'm not afraid to say that we're constantly learning. So, you know, I'm never going to say my products [are] the best. I just won't. Because I think that it's still out there." 



WHAT'S
INSIDE YOUR
VAPE PEN?
MORE
IMPORTANTLY,
WHAT
ARE YOU
INHALING?

CANNABIS CARTRIDGES: INSIDE OUT

by Madison T. Ortiz

Cannabis vape pens have become a staple consumption method for the industry at large. Vapes are popular because they offer a convenient, discrete form of cannabis consumption. However, a brief period of controversy hit in 2019 when products from the illicit market led to illness and, in some cases, fatality. The CDC called it EVALI, or the “e-cigarette, or vaping, product use associated lung injury.” After *Leafly* identified vitamin E acetate as the cause of these adverse reactions, reports of vape-related illness continued to decline. Still, the health scare highlighted the need to understand what substances are within cannabis cartridges.

The traditional cannabis market regulates through required lab testing, which tells retailers and consumers exactly what is in the product. While this is beneficial to everyone involved, the average consumer still doesn't have a wide-lens picture of what is actually going into their bodies. After all, the chemistry of these compounds changes when heat is applied.

I spoke with Dr. Markus Roggen of Delic Labs, whose vape and smoke research involves a smoking machine that simulates how a person would inhale. The inhalation is captured and the contents are analyzed. Spoiler alert: toxic compounds are found. >>



WHAT'S INSIDE CARTRIDGES?

The short answer is cannabinoids, terpenes, flavonoids, and potentially some cutting agents.

Cannabinoids are unique compounds found in the cannabis plant that interact with the endocannabinoid system. The more infamous of these compounds include THC and CBD. Synthetic cannabinoids will be distinguishable on a lab test. However, those who consume products that haven't been processed by the standards of the traditional market are at risk of inhaling these potentially unsafe compounds that are intended

to mimic cannabinoids.

Terpenes are aroma and flavor compounds found in plants. Some commonly known terpenes are myrcene, limonene, and linalool. The terpenes present in your vape cartridge are either cannabis-derived, plant or fruit-derived, or synthetic. Differentiation on the label isn't currently required, but most products with cannabis-derived terpenes will declare as such. Cartridges with naturally present cannabis-derived terpenes may be labeled HTFSE (High-terpene full-spectrum extracts).

Flavonoids are phytonutrients, which are pharmacologically active compounds that primarily provide non-green color pigmentation to plants. Cannflavins are flavonoids specific to cannabis.



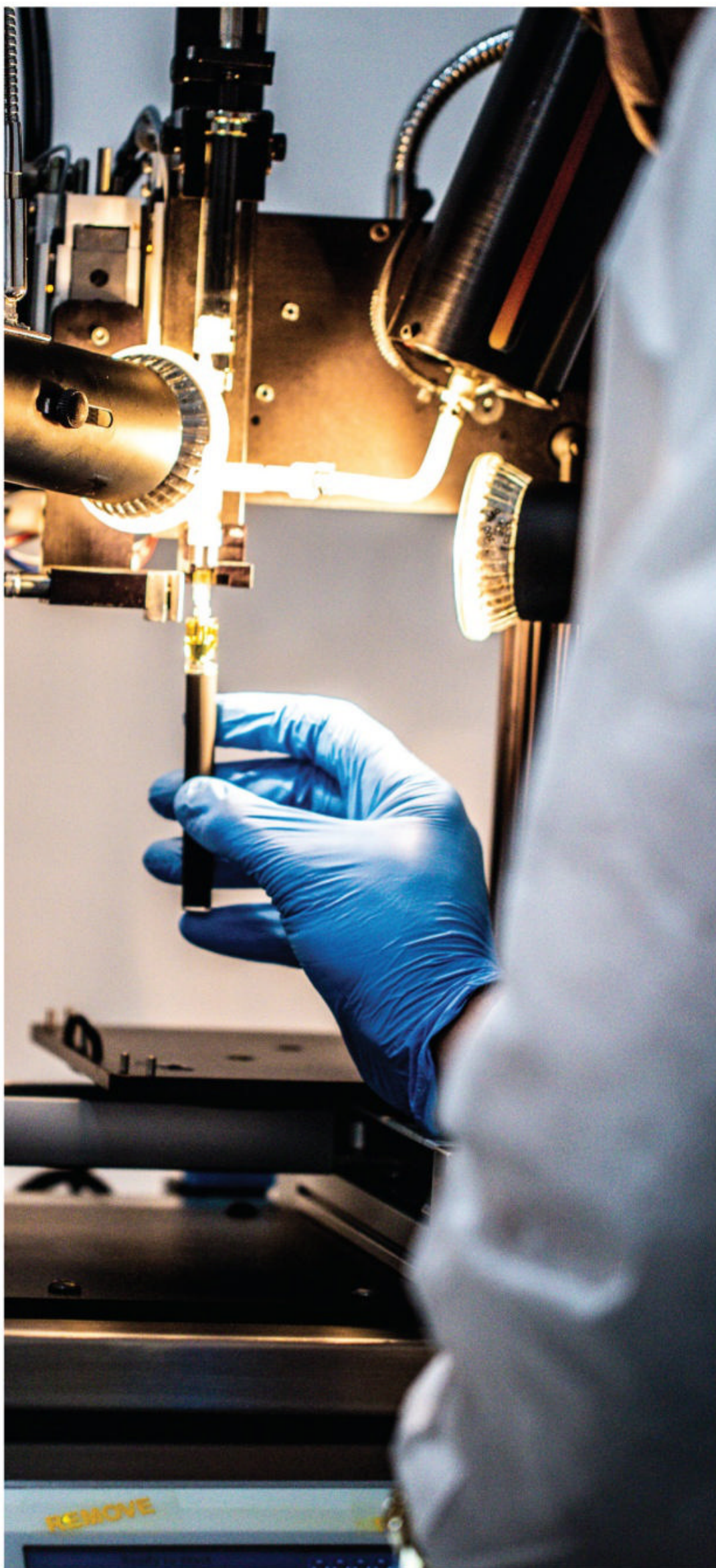
EXTRACTION METHODS AND PRODUCTS

Hydrocarbon extraction is a solvent-based method that uses either butane or a butane/propane blend, also commonly referred to as butane hash oil (BHO). While not all BHO is full-spectrum, this method is used to create full-spectrum extracts which contain all of the naturally present cannabinoids, terpenes, flavonoids, and fatty acids, without waxes, lipids, and fats. When full-spectrum extract is made from cured flowers, it will separate into two fractions based on the conditions. HTFSE are characterized by high concentrations in terpenes (13%–40%). These extracts are the perfect consistency for vaping without any additives and are becoming more commonly found in cartridges. High-cannabinoid full-spectrum extracts (HCFSE) are not typically used in cartridges because they are high in THCA and tend to materialize as a sugar or diamond consistency.

Supercritical CO₂ extraction is a solvent-based method that involves controlled temperature and pressure to create phase changes in CO₂. This method maintains the integrity of terpenes and protects cannabinoids from decarboxylation while providing the opportunity to separate individual compounds throughout the extraction process.

Distillate is produced through a solventless extraction method. The final output consists of a concentration of a specific molecule (THC or CBD) that's been isolated. By nature, distillate is flavorless and odorless, so terpenes are also commonly reintroduced to cartridges after the extraction process.

Live resin is a method in which the freshly harvested plant is frozen, skipping the drying and curing process. This typically retains more of the plant's terpenes than any other extract method; however, they are not guaranteed to qualify as a HTFSE. >>





WHAT TO LOOK OUT FOR?

Contaminants such as pesticides are a clear red flag. Common cutting agents and additives like coconut oil (MCT), propylene glycol (PG), polyethylene glycol (PEG), vegetable glycerin (VG), and vitamin E acetate will appear on lab results and be disclosed on labels for products sold in the regulated market. Other extract modifiers include plant native terpene formulas that intend to alter the viscosity without compromising the flavor and aroma. While the plant terpenes used in these instances lack the aforementioned ingredients and are food grade and Generally Recognized as Safe (GRAS) by the FDA, it's important to note that this classification refers only to food, not inhalation products.



WHAT'S BEING INHALED?

Delic Labs' data shows that puff by puff, THC concentrations are dependent upon consumption method, and there are obviously differences between vape products. The average inhalation contains 1 mg of THC per puff, though these levels tend downward throughout the lifecycle of the cartridge (which is the opposite of what the data reflected for the THC levels during the lifecycle of joint consumption.)

Thermal degradation is when the chemistry of compounds changes with increased temperature. This applies to all of the individual compounds included in the cartridge. Unfortunately,

when heat (of a specific temperature) is applied, there are toxic compounds produced.

Cannabinoids and terpenes have similar degradation mechanisms. Validated by Roggen's research, the increased voltage on vape cartridges produces more degradants (and dabbing produces the highest level). Toxic compounds present in both methods include methacrolein, benzene, and isoprene.

The impact of these chemicals on one's system may vary from single exposure to long-term chronic exposure, but the reality is that humans haven't been vaping cannabis for nearly as long as they have been smoking it. Researchers simply lack long enough data stretches to fully understand the impacts of vaping upon our health. Those who enjoy cannabis cartridges should make sure they stay informed about what's inside their vape and understand they are a voluntarily active participant in a massive group study. **HT**

FLAVOR AT YOUR FINGERTIPS

STEP-BY-STEP INSTRUCTIONS FOR CREATING DRY ICE KIEF FROM DRY TRIM OR FRESH FROZEN FLOWER.

by Ed Rosenthal

Perhaps the cheapest, simplest way to concentrate cannabinoids is also one of the newest. Since 2009, hash makers have been turning to dry ice (frozen carbon dioxide) to yield an impressive amount of kief. Dry ice sieving is one of the fastest methods to produce kief, is very inexpensive to set up, and results in very little mess or cleanup. Dry ice kief is very smooth and contains a lot of terpenes because it's made cold.

EQUIPMENT:

- Cannabis (1 ounce, dry trim, or fresh frozen)
- Bubble Bags (durable 160- and 220-micron water bubble bags)
- 5-gallon bucket
- Clean, sanitary surface area, at least 4 feet (1.2 meters) long
- Collection tool (such as a plastic scraper)
- Protective gloves
- Approximately 2 pounds (1.3 kg) dry ice broken up into small pieces

Excerpted from the *Cannabis Grower's Handbook*.

STEPS

Manual dry ice sieving uses the -106°F (-76°C) temperature of dry ice to freeze the waxy stalks of the trichomes, making them brittle enough to snap off when agitated. The snapped glands then fall through the 160- or 220-micron bag onto a surface and are collected.

Dry ice is so cold that it will “burn” human skin. Never touch dry ice with bare hands. Use proper protective gloves (such as an oven mitt or thick, waterproof, insulating gloves).

1 First, designate a sanitary indoor space and a table with a smooth, clean surface. Place trim or ground bud in the bucket. Add dry ice. Tightly affix the 160-micron bubble bag over the top of the bucket using large rubber bands so that when the bucket is turned upside down, the dry ice and trim fall onto the screen.

2 Pick up the bucket and gently shake it to help distribute the cold. After a minute, turn the bucket upside down and hold it over the table. The dry ice and trim fall to the bottom of the bag firmly attached to the top of the bucket.

3 Lightly shake the dry ice and trim mix up and down, moving longitudinally along the surface of the table so that the falling kief creates a trail several feet long.

4 As the bucket is shaken, the kief dust rains down from the bag onto the table amid little puffs of evaporating carbon dioxide. Keep shaking for 30 seconds to sieve the trichomes through the filter. The first glands are a pale golden-yellow. As the process continues, the trail of glands gets greener because more vegetative material is in the mix. The first material to fall, the golden glands, is the highest quality.

5 A scraper is used to collect the kief, which can be stored in a glass jar.

6 Repeat the process using the 220-micron bag and collect the kief. One ounce of dried sugar leaf trim can yield up to 4 grams of kief at 160 microns and 6 lower-grade grams of kief at 220 microns.





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A SWEET TREAT

"This is Oreoz #3. Mt. Baker Gardens pheno hunted this strain from Copycat Genetix S1's from an original breeder clone-only by Max Yields."

- Marvin

@mt.bakergardens

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BG's extracts are crafted for maximum terpene preservation, allowing us to produce the truest representation of our strains in concentrate form. From our lab to your dab rig, BG is the right choice. Come taste the difference.



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LOVE AT FIRST SEED

"We fell in love with growing cannabis from the very first seed we germinated. We enjoy teaching farmers around the world how to grow giant cannabis trees like this."

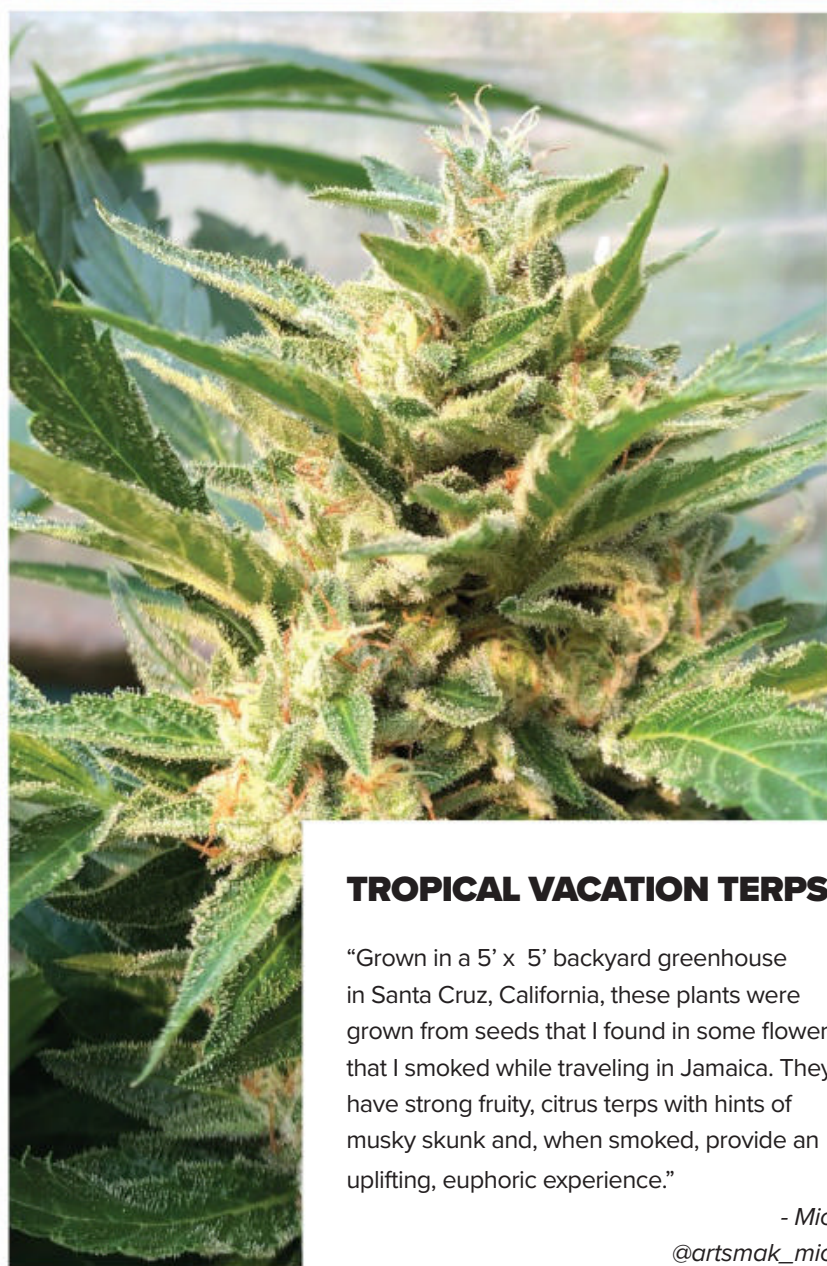
- Mendo Dope Boys
@mendodopeboys



DEDICATED TO THE PLANT

"I have dedicated the past eight years to learning about this plant. I have spent the past three years educating people how to grow their own medicine at home. I spend every single day growing alongside my father. This plant has been a blessing to us."

- Jenna
@herbudz__



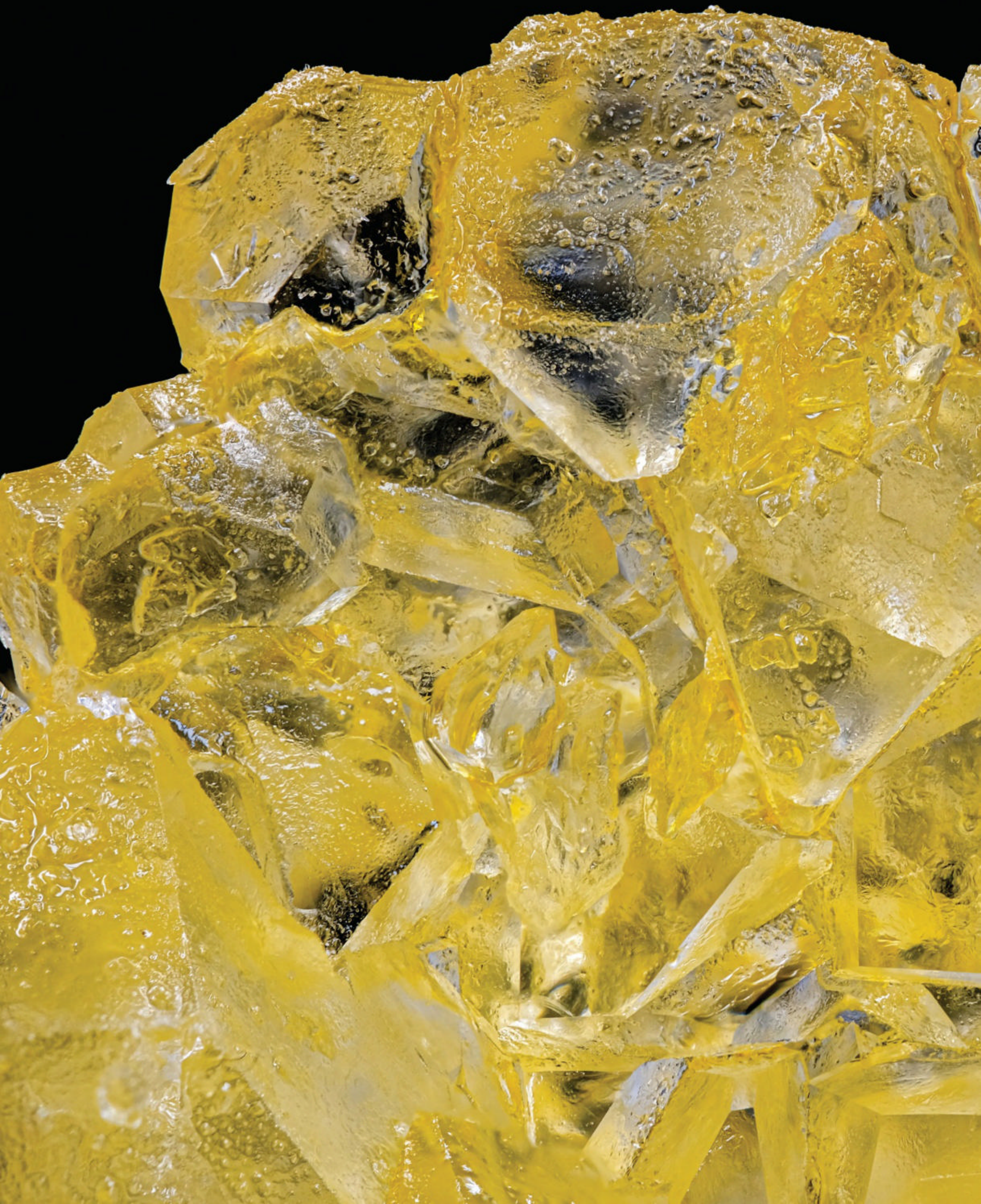
TROPICAL VACATION TERPS

"Grown in a 5' x 5' backyard greenhouse in Santa Cruz, California, these plants were grown from seeds that I found in some flower that I smoked while traveling in Jamaica. They have strong fruity, citrus terps with hints of musky skunk and, when smoked, provide an uplifting, euphoric experience."

- Mio
@artsmak_mio

CATATONIC HASH OIL
CANNACULTURE COLLECTIVE







HIGH TIMES

MIMOSA DIAMONDS

Flower by STR8 CHRONIC, @str8chronic

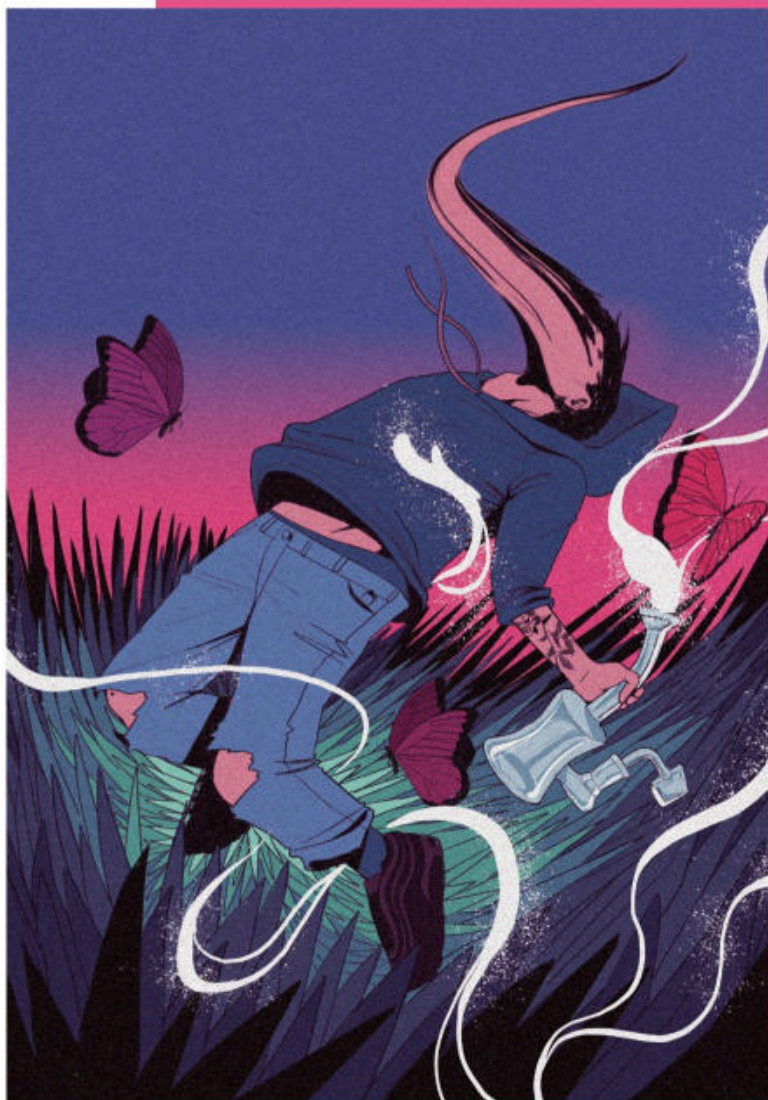
Processed by Team Green, @teamgreen207

DIAMOND NUGS

CREME DE CANNA



ON THE BACK COVER



A Whole New World

710 is a celebration of the many beautifully complex types of cannabis concentrates. With potent properties that have the potential to elevate your mind to a higher consciousness, concentrates are a whole new world of experience.

ILLUSTRATION: GUSTAVO PERGOLI

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World-Class Hash

Royal Key Organics, led by Josh Vert and his wife Erin Hamilton, are OGs in the cannabis industry. Through risk and reward, their company has risen miles above its competition, which has led to Royal Key's respected reputation.

82

THC & Terps

Get information straight from the source—SC Labs and Greenwolf Dispensary talk about the shift in consumer preference between THC percentages and terpene profiles. While THC remains king, the popularity of seeking out unique and flavorful terpenes is rapidly closing the gap.

90

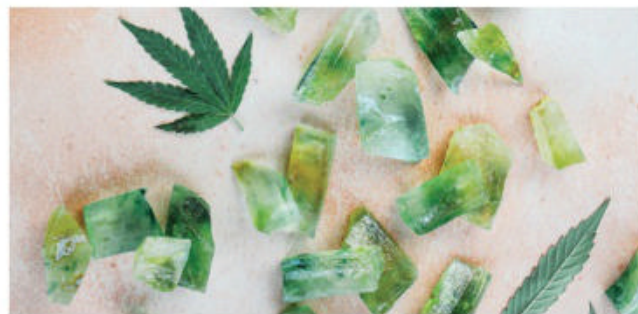
Cypress Hill Still Knows How to Bring It

After over three decades, Cypress Hill group members express their hip-hop legacy in an exclusive *High Times* interview. This year marks an especially monumental one for the group, with the debut of a Showtime documentary called *Cypress Hill: Insane in the Brain*, which is centered around the group's unique mark on musical history, as well as the release of their latest album, *Back in Black*.

102

Smoking with the Homies Paul Wall & Termanology

Rappers Paul Wall and Termanology discuss their album collaboration and reminisce about their individual accounts of smoking cannabis and how times have changed.



110

DIY Weed Gummies

Monica Lo, author of the upcoming book *The Weed Gummies Cookbook: Recipes for Cannabis Candies, THC and CBD Edibles, and More*, has a history of crafting unique edibles. Learn about how she became an expert in gummy creation and how to make a gorgeous infused gummy gemstone recipe that looks almost too beautiful to eat.

MOONBOW
BLASPHEMY
(LIVE ROSIN + HTE) ALIEN LABS + ROYAL KEY
VIA SUPRIZE SUPRIZE



ROYAL KEY
ORGANICS
FOUNDER
JOSH VERT
EXPANDS
ON THE
CHALLENGES
OF BEING ON
TOP OF THE
CONCENTRATE
INDUSTRY.

WORLD-CLASS HASH



by Jimi Devine

FEW NAMES CARRIED THE HYPE OF Royal Key Organics entering the era of legal cannabis, and the snowball looks ready to keep rolling ahead of the brand's relaunch later this year.

While we'll get to all the heat in general, the basis for Royal Key and any great hash company is the quality of the inputs. "Inputs" mean a lot of things in the weed space. You might be talking about the material you're going to make hash out of or the nutrients going in your plants. But it all carries through with great hash. Every input along the way is detectable, lack of effort and shortcuts amongst them. So when you see a company with legendary hash making it exclusively with its own material, it makes it that much more special. To this day, the most famed batches of Royal Key live resin would hold up with the best hash ever made.

Royal Key's founders, Josh Vert and his wife Erin Hamilton, have been cultivating cannabis together for 12 years. Their products have placed first in every live resin contest that they've entered since 2017, totaling five Emerald Cups. After whipping up top-shelf flowers for the Northern California market's most elite shelves for much of the early 2010s, they formed Royal Key. There they would build the brand identity brick by brick into the powerhouse it has become today. The list of how many companies with Royal Key's scale of operations that command as much respect as they do would be a short one.

While the dynamics of that talking point will change as Royal Key is preparing for massive growth in the years to come, its ethos won't. Whether a brand had 50 lights or 5,000, they would kill to have the same kind of name recognition. >>





LIVE RESIN FROSTING, CIRCA 2016

THE ROAD TO ROYAL KEY

These days, Hamilton handles the growing while Vert works on business development. But back in 2015, Royal Key Organics was just the name they settled on as they began to conceptualize their brand. Conceptualization turned into execution, and once their hash made its mark on the new budding “live extract” scene, they were a household name with the most elite tier of cannabis consumers.

“Royal Key in 2015, ’16, and even ’17 was 100% propane-based because there were zero residual solvents,” Vert said. “We were doing testing and selling directly to the clubs at that time with our paperwork and everything.”

Royal Key was dropping insane sauces during that time with extraction techniques they’d work to develop in-house. It was a long hard process to get dialed in, but the results quickly spoke for themselves as they hit the market.

Royal Key’s techniques were not being imitated. They had the juiciest propane-extracted terps by a mile. A lot of the propane extracts had the now mostly retired pull and snap consistency.

Vert weighed in with why he thought his competition couldn’t achieve similar results back then.

“I think it was what we were growing,” he said. “Without me knowing what their starting material is, all I could do is tell you we were pheno hunting, growing indoor, and taking the whole crop that we picked for live resin and making it into live resin, which no one was doing at that time.”

Vert noted that Southern Humboldt Concentrate was doing greenhouse-grown flowers for live resin before Royal Key was doing it indoors.

“I tasted Bruce and Pete’s Zkittelz; it blew me away and influenced me,” Vert said. “It made us go to the drawing board. Nobody was going to help us out. There are no classes for live resin or anything, but we did it. I think it was terpene-rich and heavy because of the way we were growing indoors and using those cultivars.”

But during this whole R&D process to develop their hash technique, their flower was already commanding top dollar. Vert said it was really hard at that moment to take such a huge risk with the material instead of getting easy money for it because it was so good.

While terrifying at the moment, it would be a major mile marker for Royal Key.

“It was a huge risk,” Vert said. “There was a crux of it right where you’re like, ‘Hey, this little batch worked, but let’s try the whole batch’ kind of a thing. And that was really scary. Because we weren’t sure what we were gonna get, like how good it would be, all those things. And so it was tough. It was daunting, but the product prior to that and testing was so good. And we had such a good response from it that we just went for it. And it ended up working out, but yeah, it was scary.” >>

NANA
BREATH
(MOONGAZER + ROYAL KEY)
VIA SUPRIZE SUPRIZE





PAPAYA
VALLEY DOG
(MOONGAZER + ROYAL KEY)
VIA SUPRIZE SUPRIZE

SUPRIZE SUPRIZE

Eventually, things would reach their peak at the 2017 Emerald Cup. Royal Key had released nearly 20 flavors they hunted in-house. One of the reasons they went all out was because they knew they were exiting the market to build out the property they'd secured in Arcata. They worked extensively through 2018 to relaunch at the cup a year later.

"But we had shut down everything and we just have been able to gamble on opening the lab first before the cultivation of the flower," Vert said. "So, therefore, Suprize Suprize launched first at the Emerald Cup, and there was no Royal Key because we weren't growing it yet."

While Royal Key was all in-house grown material, Suprize Suprize would be the mechanism that allowed them to collaborate with others they'd been hoping to collaborate with, like Alien Labs.

In the years since they launched Suprize Suprize, it has joined Royal Key on top of the pantheon of California heat while adding to the trophy shelf. As Royal Key worked to build out its new grow, Suprize Suprize kept expanding. The dice roll to open the lab before the grow paid off. They became major players in the white

label market, and in doing so, they helped other producers process their material. We asked Vert if he ever saw that coming.

"We hoped it would," Vert replied. "But also at the same time, we wanted it to always really be good quality. So it's tough because whenever I hear white label, I'm like, you know, it's something that feels like it's not something you can't get passionate about, or it's not good. I didn't want it to be watered down. I did think it could be something bigger because, obviously, it goes beyond what we can grow."

Through all the madness, Vert watched the price of live resin plummet. The \$40 wholesale numbers his product once commanded no longer existed in the market. At this point, Royal Key put their foot on the gas when it came to R&D on rosin. It wasn't easy.

But one thing that helped the cause was that the Royal Key flower, including a cultivar called M-Con #8, was starting to drop.

"Thank God," Vert emphasized. "At that time, we would watch M-Con #8 in 2019 in the LA market primarily, but also throughout Northern California. That saved our asses when everything was just starting to be a mess in the extract world."

As the pandemic hit, Royal Key's solventless products were getting a bit more in order, but Vert wasn't truly satisfied. But on the live resin side, despite price crashes, Royal Key was still the best in the world. There was a dip in the live resin production when their longtime extractor, Pete, passed away. He was a core member of the team and is greatly missed.

Eventually, everything was back at full blast.

Despite the praise the flower was getting, Vert said the business was challenging. Royal Key was using lights from the Proposition 215 medical era in the buildout. The intensity of the lighting was a bit lower than what he felt like they needed to achieve the maximum expression of the crop.

But everyone else thought it was stupid heat, myself included.

"We're struggling to grow like, you know, as high quality as we can, but it's just really fucking hard," Vert said of the 2019 comeback harvest. "Everything that we do seems like moving through quicksand, but we're able to lock some batches, and people were really happy with it. You know, it saved our ass." >>



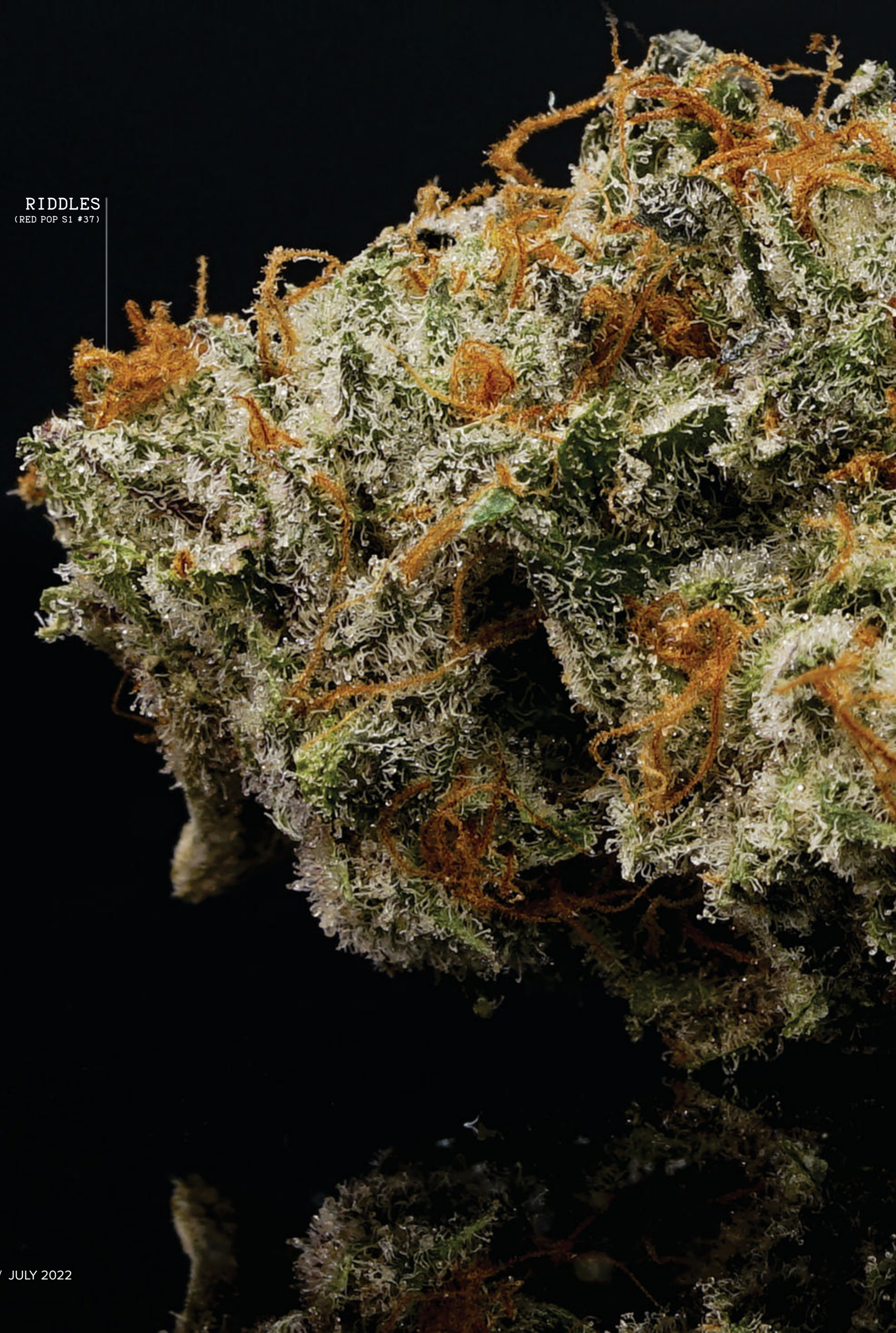
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"WE WERE PHENO HUNTING,
GROWING INDOOR, AND TAKING THE
WHOLE CROP THAT WE PICKED FOR
LIVE RESIN AND MAKING IT INTO
LIVE RESIN, WHICH NO ONE WAS
DOING AT THAT TIME."

- JOSH VERT

STRAWBERRY
COOLER LIVE
ROSIN

GROWING A BRAND

Due to the limited output, Royal Key remained exotic. They definitely left some money on the table, as word of how heat the M-Con #8 they grew from a pack of Equilibrium Genetics seeds got around.

Vert explained what it was like watching the brand explode in popularity but not having enough product up to their quality yet to meet the ever-growing demand.

“It’s like feeling like you’re in a straitjacket all the time. You’re just financially in a straitjacket, and there’s problem after problem,” Vert said.

As he watched demand increase, it felt like he oversaw the company go through eight to 12 near-death experiences of their business during this time as well. But the financial perils have come to a close. In 2021, Royal Key found someone who believed in the vision. Through all the rough waters, they were constantly attempting to fundraise. Regularly, they would get deep into discussions with groups who would come at them with a buyout offer despite the fact they were never looking for one. Vert would move on to the next opportunity in hopes of finding someone who wanted a piece of the vision and not all of it.

Vert and Hamilton were very adamant that they didn’t want to sell and needed someone who believed in them. They wanted to be a good partner, but couldn’t let someone else steer the ship. The various negotiations led to some sleepless nights. It can be tough to rest after you’ve just turned down a big-money offer that would take you out of peril.

Eventually, Royal Key found Holistic, which was happy to come in as a minority partner on the proven brand.

“We’ve fixed a lot of the problems that we had,” Vert said of the capital infusion. “We told them that we were

going to exit the market, which was sketchy for us to do because everyone still needs results when you’re getting investment. They don’t want you to lose money for seven or eight months, but we exited the market.”

During their time away from shelves, Royal Key has done two back-to-back phenohunts. Vert also found some phenomenal hash artists who needed to work in a good home. He argues the new additions truly bumped up everything to a world-class level.

We asked Vert if it was ever tough to watch Royal Key’s solventless lines develop while the BHO was renowned out the gate.

“For sure, and I’m always willing to admit that, and we did admit it,” Vert said. “It just never met the grade until 2021. Probably in the spring of 2021 is when it changed, where everything changed perhaps, and then by the end of 2021 we are entering contests.”

Vert thinks the solventless hash is there now. It was always about getting Royal Key’s solventless products to the same respect levels as its live resin.

“I mean, I’ve taken it everywhere,” he said. “I’ve taken [out] the full melt that we found. The only thing that we’re yet to show is the single source, in-house stuff. Stuff that we grow and phenohunted for. And once we release that stuff, I think there won’t be any question.” **HT**

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THC & TERPENES

by Benjamin M. Adams

THC, or tetrahydrocannabinol, is the principal psychoactive compound found in cannabis. Prohibitive cannabis laws define the plant based on THC levels, and in the United States, cannabis with less than 0.3% THC on a dry weight basis is non-psychoactive and therefore considered hemp.

Until recent years, consumers at the dispensary counter were primarily only concerned about jockeying for the cannabis and concentrates with the maximum amount of THC. Today, they're smartening up and asking more about terpene and other cannabinoid content. THC, however, remains the most crucial compound overall in terms of the plant's psychoactive high.

There are multiple reasons for seeking high-THC levels in products beyond shooting for the most potent effect. One benefit of high-THC products for medical patients, for instance, is that high-THC products can provide relief while limiting the amount of smoke and thus reducing harm. >>

THE CHEMISTRY OF HIGHER THC PRODUCTS

SC (Science of Cannabis) Labs opened in 2010 in Capitola, California. Co-founded by Jeff Gray, Josh Wurzer, Alec Dixon, and Ian Rice, the company helped develop some of the industry's first testing standards.

"Early on, we emphasized testing cannabinoids and specifically THC," SC Labs President and Co-Founder Josh Wurzer says. "The THC content became very associated with the perception of quality in cannabis. That was the only quantitative metric you had to describe the cannabis—the percentage of cannabinoids."

Examining high THC levels is one of Wurzer's focuses, as he applied for several cannabis-related patents, some related to the improvement of the extraction of cannabis.

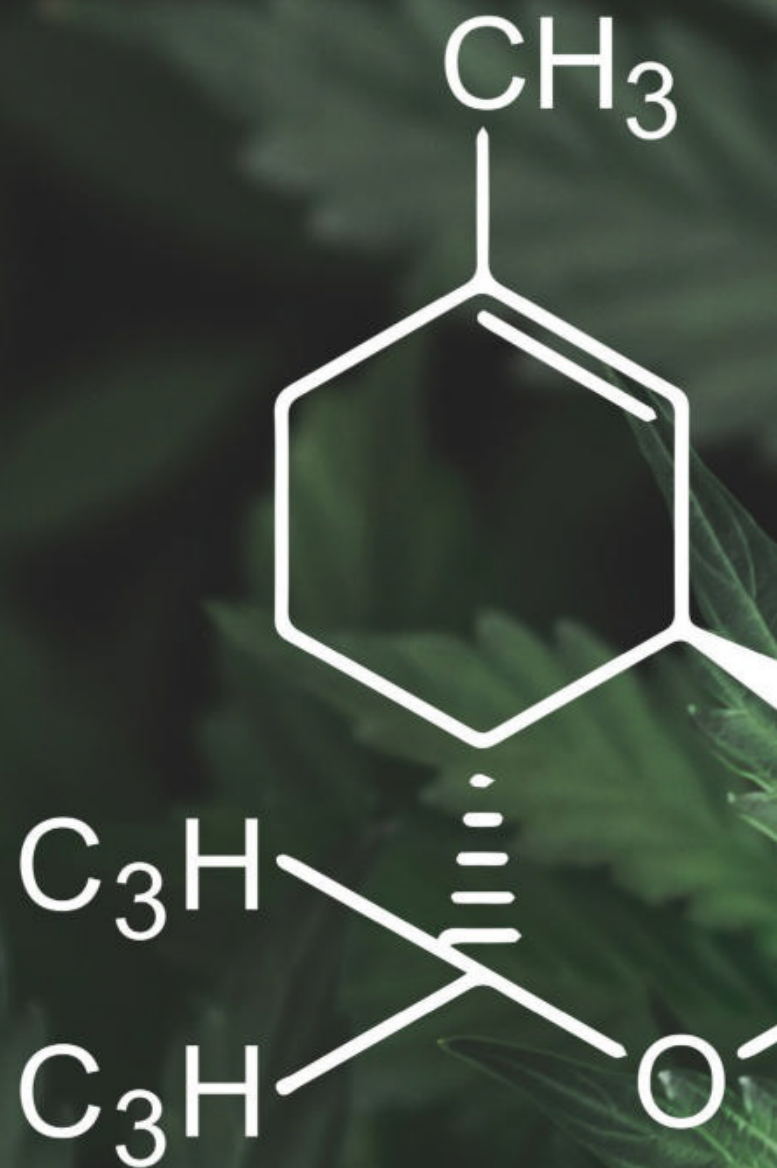
Today, many people still equate higher THC concentrations with better quality.

"That's just not the case," Wurzer says. "When we look at these different events—*High Times* Cannabis Cups and The Emerald Cup—the winners usually don't have any higher THC percentage. They almost always have a greater average terpene concentration. What consumers should be looking for is the terpene concentration of the products they're buying."

The over-emphasis on THC is partly due to chemistry and the way THC is quickly depleted. THC is, in fact, surprisingly quite delicate once the smoking process begins.

"The THC percentage isn't really that important in an inhalable product," Wurzer continues. "You're exhaling the vast majority of the THC you're inhaling. Really, you could just hold the hit in longer, but the THC concentration doesn't even necessarily get you higher. What makes [cannabis] taste better and makes the effects more pronounced is the terpene concentration, and that's where consumers should be looking."

While it's the most powerful psychoactive compound in cannabis, THC is best experienced the natural way, combined with other compounds. >>







“GOOD LIVE RESIN CONCENTRATE SHOULD BE ANYWHERE FROM 60 TO 80% [THC], AND THAT’S GOING TO BE THE MOST FLAVORFUL.”

-ALEC DIXON

THE HIGHEST THC CONCENTRATES

Just how high in THC percentage can concentrates get? Some approach pure THC.

“I’ve seen people make 99% concentrate distillate—purified THC—but I wouldn’t want to smoke it,” SC Labs Director of Client Relations and Co-Founder Alec Dixon says. “I wouldn’t want to consume it. It would taste bad. It would be harsh. The higher concentration concentrates are generally not the most desirable.”

If the taste matters, a better metric for determining the quality of concentrates would be quite a lower amount of THC, he says. The way terps are preserved in live resin is one of the ways concentrates have improved over the past decade or so.

“Good live resin concentrate should be anywhere from 60 to 80% [THC], and that’s going to be the most flavorful,” Dixon says. “I’ve seen the best effects on live resin, and it’s generally considered to be a much more premium product than, say, like a distillate that’s in the 90s and that has artificial terpenes added to it.”

Dixon says that on the cultural side of things, it’s always been known to farmers that terpene content is way more of a predictive indicator of quality, evident when you open up a jar and bomb the whole neighborhood with the smell of great pot.

“Smell and aroma directly coordinate

toward effect,” Dixon says. “In their absence, it’s quite a bland THC effect. Unfortunately, the market is so focused on THC. It’s bound to be terp-less and, in turn, soulless. Part of what we do with the Emerald Cup and California State Fair is to sort everything by terpene. It comes down to personal preference. To me, my favorite profiles are gas and Haze, that terpinolene Jack Herer strain.”

SC Labs is among many labs that test for THC content, and variance depends on where the samples are taken.

“When it comes to potency, the top versus the middle versus the bottom bud, they can test very differently depending on how the farmer prunes their plant,” Dixon says. “The more leaves on the plants in the crucial parts of development, the bigger the variance is going to be from top to bottom.”

He says that most farmers who do canopy management and remove foliage remove way too much leaf, way too late in the flowering stage. As a result, areas in the middle and bottom sections are shaded by leaves, leading to massive variance in the potency levels of the buds depending on where they are grown. >>

 sclabs.com



PHOTO: NOA COMMENDADOR

HIGH THC FROM A CONSUMER PERSPECTIVE

Greenwolf dispensary has won many Cannabis Cup awards, too many to list in full, but a few concentrate wins stand out. In 2017, Greenwolf took home a barrage of awards at the Cannabis Cup, winning first place with MNG for “Best Sativa Concentrate” with their offering Nectarine. In 2018, Greenwolf won “Best Non-Solvent Hash” for Clementine in collaboration with Rosin Brothers. Greenwolf is known throughout Southern California as a trusted retailer.

Greenwolf hosted the Greenwolf Winter Zalympix Awards Ceremony on Jan. 22 in Los Angeles, featuring YG and Larry June, among other performers. It was an exotic cannabis competition with judges’ kits and an awards ceremony. Greenwolf also presented the Zalympix Championships on June 11 in collaboration with Secret Sesh. Competitors representing the winners of the summer and winter Zalympix events competed in a “Battle of the Champions.”

The Greenwolf team is used to people asking about THC levels and their importance to the smoking experience. Come to find out, they are bombarded with this question daily.

“I’ve been talking to actual customers all morning about this!” says Liz Caffrey, owner and COO of Greenwolf. “And it’s interesting because I feel like maybe two years ago, people literally just came in, and they didn’t care what the strain was called or who grew it. All they wanted to know from a budtender was what the THC percentage was.”

Caffrey says in the last year or so, people are getting more and more educated about what defines quality cannabis, and they’re starting to realize that the THC percentage is not always the sole compound that produces the plant’s effects.

“The terpenes play a large role in the actual effects that you feel,” Caffrey says. “And I do believe that the consumer is starting to realize this.”

Caffrey doesn’t really see anything over 40% THC—except for infused pre-rolls when it comes to flower. Infused pre-rolls are enhanced with concentrates such as wax, distillate, or diamonds. Caffrey says labels can be quite deceiving, as one brand could have stunning packaging with disappointingly subpar effects.

“I do feel like the consumer is finally starting to have brand loyalty in what I call ‘the new market.’ And they’re doing their own research, which is great,” she says.

Caffrey explains that people don’t realize that the feeling they get from a good sativa that has 20% THC but is grown well might also have a high limonene percentage, which can provide a mood boost.

“I feel like [THC levels] go hand-in-hand with pricing,” she says. “Like the consumers more willing to pay a higher price if the THC percentage is above 30. I consider high THC 30 to 40%.”

Caffrey says that in retail in California, pre-rolls are probably the number-one seller, and infused pre-rolls are the top-tier of these types of sales.

“A customer will look at an infused pre-roll in awe, as it can have a 50 to 80% THC profile, and they think, ‘I’m getting all that in this one gram!’”

When choosing a high-THC product, consider taking the advice from laboratory leaders such as SC Labs or retail leaders like Greenwolf. As anyone with experience will tell you, inform yourself of the terpene content as well as the THC. **HT**

 greenwolf.la





"THE TERPENES PLAY
A LARGE ROLE IN THE
ACTUAL EFFECTS THAT
YOU FEEL, AND I DO
BELIEVE THAT THE
CONSUMER IS STARTING
TO REALIZE THIS."
-LIZ CAFFREY



CYPRESS HILL (FROM LEFT)
ERIC "BOBO" CORREA, B-REAL,
AND SEN DOG.

Cypress Hill Still Knows How to Bring It

The iconic rap group discusses their new album, recent documentary, and connecting people through music and cannabis.

by Stephen Laddin

For over three decades,

legendary hip-hop group Cypress Hill (B-Real, Sen Dog, DJ Muggs, Eric “Bobo” Correa) has been churning out hits for the charts, but on their own terms and in their own way. And it’s worked.

With a musical flavor that’s catchy, provocative, and raw, Cypress Hill continues to contribute meaningful material to the hip-hop genre and now can add a documentary to its resume.

When connecting with *High Times* via phone, the group shares background information on their new Showtime documentary, *Cypress Hill: Insane in the Brain*, their latest studio album, *Back in Black*, and an overview of their esteemed career that has them thoroughly cemented as hip-hop’s unofficial cannabis ambassadors.

HIGH TIMES MAGAZINE: How did Cypress Hill come together, and what was the inspiration behind everybody joining the group?

B-REAL: We knew each other as teens and were all enthusiastic about hip-hop. We all had the same love and passion for it.

I met Sen Dog through his brother Mellow Man who I knew through the hip-hop circles in South Gate. We met DJ Muggs through our childhood friend Julio G, who was also a DJ, and we met Bobo a little bit later when we were touring with Beastie Boys. But Sen, Muggs, and myself have known each other since our teens, and we wanted to emulate the hip-hop groups that we looked up to. We made our best efforts to—as a hobby—get into the culture and all of that stuff. Eventually, we started taking it more seriously. [Hip-hop] became something that we knew that we could do and would do, so we ventured out into the world to try and make a name for ourselves.

ERIC “BOBO” CORREA: When I met the guys—B-Real, Sen, and Muggs—I was a fan. I had never heard a group that was outright talking about smoking weed. They were talking about what they normally do. I don’t think they sought to be the spokesperson for cannabis or anything, especially at the time when it was much more taboo than it is now.

I remember the first time I heard them. I was in college going to pick up some weed from the weed guy, and he was playing Cypress: *Stoned Is The Way Of The Walk*, *The Phunky Feel One*, *Light Another*. I was really tripping out because, again, no one in hip-hop at that point was really outwardly rapping about weed. If it was mentioned, it was mentioned, but when you say “stoned is the way of the walk” or “light another,” you’re outright putting it down.

By the time *Black Sunday* came around, I’d started touring with [Cypress Hill], and that album had gotten enough exposure within the cannabis community where it was like, “Okay, here are some facts. This is part of the fight.” They started linking up with Jack Herer,



**"They thought
we were lucky
with the first
album, and then
the second
album comes out
and busts them
in the face."
- B-Real**

NORML, and things like that and were able to learn some of the other things about cannabis so they could rap intelligently about it versus, "I'm just smoking to get stoned with my homies." They took a more intelligent approach.

Was there a specific catalyst to you guys taking things more seriously?

B-REAL: We didn't know what we had in terms of the possibilities that were out there for us, but we believed in ourselves,

and we believed we could do something. What it was and how it would impact us, we didn't know, but I think we knew we had something in the second phase of our demos.

We'd made a group of demos that were good, but they weren't really there yet. We hadn't hit our stride, and this was before I shifted my voice over to the high-pitched vocal that people have come to know me for. We didn't sound anything like we ended up sounding for the second phase, where we were being a little more experimental.

After a couple of years of doing our first demos, we had a better idea of how it was supposed to go, and we just leaned on the work. We just kept working on ourselves, working on the craft, working on songs, and trying to come up with something that no one had out there yet.

It was that second phase of demos when we put down *Real Estate*, and I shifted my voice. After that, we hit a stride, and it all started clicking. *Real Estate* was our first real demo where we were like, "Oh wait. This sounds like something." →



You went with what you felt was organic, and from that, everything started to fall into place.

B-REAL: Pretty much. We were believing in what we were doing at that point. We had our own sound that we were riding on, and nothing else really mattered. Fortunately, it cut through, but we had spent a lot of time developing that sound.

How much of the group's "cutting through" was also related to cannabis?

B-REAL: When we were talking about cannabis on the songs, it wasn't a preconceived thing. Muggs gave me the music, and the songs spoke to me a certain way. What came out was totally organic; it was never like, "Oh, we need a song about weed." Realistically, us trying to plan that out... I don't think it would have cut through the same way, especially because, at the time, anyone who was doing this knew that hip-hop was looked at as a step-child music genre, and talking about cannabis was taboo. So we had two things rolling against us at that point. We just did it and said, "If you like it, great. If you don't like it, fuck off." That was the mentality, and fortunately, it connected.

For any artist, any album, or any song, any creative output is a gamble. You don't know if it will connect. You have faith in yourself and your abilities, but it's hard to gauge if what you put out is going to catch. Fortunately, our first outing caught.

It sounds like you were doing it in an authentic way. Regardless of subject or genre, people can feel if it's real.

B-REAL: That's always the downfall of most artists when they get success with a song. The record company wants

another single, and they want you to emulate the song [that was successful] or do something just as poppin'. That's when the pressure starts. It's like, "Fuck, I gotta do something that's big if not better than that." You're not just making music at that point; you're chasing this previous success you had, and your creativity starts to dip because you're not really having the freedom to be the artist you have the potential to be.

I'll give all credit to Muggs because as much as they wanted us to chase singles like *How I Could Just Kill a Man*, *Insane in the Brain*, and *(Rock) Superstar*, and all that shit, he kept on trying to do something different. Like yo, "We're not going to recreate [those songs]; those are what they are. We're going to keep pushing forward and do something different." And sometimes we won; sometimes we did okay; sometimes we didn't win. That's the life of an artist, the gamble of putting your art out and seeing what hits.

How were you able to focus on staying true to yourselves?

B-REAL: A lot of times, we'd have a "no label people" policy in the studio. No managers at the studio. Because in the early days, we'd have some of the Sony people come in, and they'd be trying to give us suggestions, and Muggs would be like, "That would be great for your album. Excuse me. We gotta have a meeting right now." And there was a hands-off [policy].

To Sony and Ruffhouse Records' credit, they let us be us. They let us take our chances; they let us gamble on ourselves, and they rode with us on that. There were only certain times where they made strong suggestions like, "Hey, we need this from you. We don't ask much from you; we let you do you, but right here, we need this." And we obliged because they let us develop as opposed to try and control or develop us in the way

“We can now celebrate advances on how far we’ve come with many states [legalized] for medicinal or recreational use. Just to see that in this lifetime is incredible, and we get a lot of people who thank us for continuing the fight and continuing to bring people together in this way.”

- Eric “Bobo” Correa

they wanted us to be. That was everything, and that’s why we’re still here—because they allowed that—as opposed to trying to create the path for us or make us be something that we weren’t.

We were fortunate to have the label believe in what the fuck we were doing and in our ability to develop ourselves, and then just put all of the support behind it. Sony and Ruffhouse were definitely advocates for us at that time. Even when they thought we were wrong in the way that we were moving musically or visually or this or that, they still rode with us. It was a unique situation we had there. Sony’s belief in us even after Ruffhouse was gone... that meant everything to us.

Like with fans, it’s probably easier for the execs to get behind the music if it resonates with them, too.

B-REAL: I think it makes their job easier. A lot of artists don’t really have a handle on their music. The path that they

want to carve out—they usually learn it as they’re going along. You have labels that try to carve the path for you and make you the artist they think you need to be and whatnot, and that’s tough when you play that game. Because when [the label] makes a mistake, or they miss, they can just carry on with another artist, but you might be done at that point. It’s a lot of trust you have to have.

These creations of albums, they’re like your kids. You want them to be in the best hands possible. And we were fortunate. Any other label we were signed on, we probably don’t have this run. I always recognize that and try to give Ruffhouse and Sony the flowers from us that I feel like they deserve.

ERIC “BOBO” CORREA: The fans have always been a big part of what we are about. We’ve always been at one with the fans. Without them, we wouldn’t be able to do what we do. We’ve gotten a big collection of fans all over the world who really support our cause in a positive

way. We’ve never put smoking, growing, or consuming in a negative light, which is important to show because there’s still a lot of work to do.

We can now celebrate advances on how far we’ve come with many states [legalized] for medicinal or recreational use. Just to see that in this lifetime is incredible, and we get a lot of people who thank us for continuing the fight and continuing to bring people together in this way. I think that’s a big plus for me. We’re all in this together. We come together through music and through an enjoyment of cannabis to make things cooler, have a much cooler vibe, and share that with fans. That’s always been a great benefit to being a part of Cypress Hill, and it’s something that I hope we continue to do.

What type of weed would you say embodies Cypress Hill?

B-REAL: It’s a trip that it all started with us being smokers and being stoners and advocates, to leaking into the music, and then it sort of leaking out into the industry. It’s from one phase to another. We’re stoners, and now we’re musicians, and now we’re talking about being stoners in our music.

When we got recognized for that by *High Times*, NORML, Cannabis Action Network, and all of the advocacy groups, they started holding us up as the spokesman for it. So doing that sort of advocacy and activism for so long, when now it becomes not just cannabis culture but cannabis industry, it sort of gave me a head start to coming into that world and creating Dr. Greenthumb, opening retail stores, and creating strains called “The Insane” brand, which are all tributes to Cypress Hill and whatnot. →

What is it specifically about joints that do it for you?

SEN DOG: I'm sure it has something to do with the better weed that we have nowadays, but joints were how I was first introduced to marijuana—sneaking off and smoking little pinners here and there. And that's how I've always kept it. Just put a paper around that thing, light it up and smoke it. It's the easiest way.

We're better rollers now. Back in those days, joints were skinny at the bottom, fat at the top, or vice versa. We

Is there a brand or strain you always have on hand in the studio or with you on the road?

SEN DOG: Dr. Greenthumb supplies everything on the road, so there's always a good amount of weed and pre-rolls on the bus, you know, 'cause of our good friend [laughs]. The guy Berner from the company Cookies—he takes [weed] down for the tour and whatnot, so between [Berner and B-Real] and our brother Kenji, there's always been good smoking, especially now. The weed on the bus is extremely fire.

heaviest. When you come from what we came from—and now you can afford the best—why wouldn't you just get the best all the time?

ERIC "BOBO" CORREA: [Cypress Hill is] strictly flower, though I really enjoy concentrates. I probably do more concentrates than the other guys. Jungle Boys and Cali Blaise.

SEN DOG: Not me, man. I keep to true blue marijuana joints for the most part. I stick to the fucking joints and keep on smoking. →



didn't really know how to roll then, but now we're master roll men.

Master roll men with the option of pre-rolls.

SEN DOG: Exactly. You don't have to go in there and buy bud. You can just buy it rolled up already and put it in your bag and go.

I kind of like where things are going for the cannabis industry and what they have to offer. There's something there for everybody; you just need to figure out what it is and what makes you, you.

I heard you guys also dabble with weed-infused meats. Is that on the road too, or just here in Los Angeles?

SEN DOG: We have partners around the country who take care of us on that level. I'm always surprised by what people cook down to take on the road or even hang out with, but in Los Angeles, Bartz Barbecue is pretty fire shit.

SEN DOG: I stay kind of "Kushed" out. That's my strain. When I go somewhere, I always try to look for Kush. It's the



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You guys have a new album out—*Back in Black*. What was the inspiration behind it, and how do you hope it resonates with fans?

SEN DOG: *Back in Black* is Cypress Hill returning to our roots. It's a true hip-hop album. I know people are used to us mashing things up with other stuff, but not this time. We wanted to put together a traditional hip-hop album and prove to a lot of people that we still have the ability to do that kind of thing.

We worked on the album with producer Black Milk out of Detroit, which was the first time I'd worked with him. His vibe was so pure and confident. Not in a conceited way or anything, more when a guy knows he's good at something, he knows he's good at something. The way he presented himself and the way

he talked to us was the way that I feel artists of our tenure should be spoken to. He made it really easy for us to do what we do.

We would knock down the songs and then send them to [Milk]. By the next time we'd heard them, he had changed the whole musical bed around. So it wasn't the same song, but it was better than the song we'd done originally. He did that throughout the entire album, so by song six or seven, we were like, "I can't wait to hear this shit when he sends it back," because we knew it was going to be special.

To work with a super positive-minded person who's hard to frazzle or get pissed off or anything like that, I felt like we were in the right situation at the right time. We don't want to work with anybody who's not a fan of

ours to begin with. We want somebody who's like, "Oh, I get to work with Sen and B? Yeah!" And that was [Milk's] attitude. Black Milk has this ability to make anybody he works with sound badass, even better than their prior history. I don't know if that quality is taught or learned or if you're born with it, but he has it, and it's just cool as fuck.

Do you think it's a combination of him knowing he's good at something, having that positive energy, and then being able to infuse that into the music?

SEN DOG: I do think it's partly that for sure. You can't be the best if your attitude sucks. When you have good vibes about you, I think that spreads around to whoever else is around you. →



***“We consider
ourselves brothers,
a brotherhood. And
smoking is about
unity, smoking the
peace pipe, coming
together, and
everything will be
peaceful. It’s
always been about
that, and in a way,
it is unifying.”***

- Eric “Bobo” Correa

If that's the environment that's being cultivated between you guys as you're creating the music, then inherently, the musical output is probably better.

SEN DOG: Yeah, if that wasn't happening, the music wouldn't sound spiritually correct.

There's something about music—when it sounds spiritually correct—that makes it resonate with people on a deeper level.

SEN DOG: My favorite kind of person I like to meet when I'm meeting fans and

have nothing to do with. That honesty has to come out of you first in order to get that reaction from other people.

You also have a new documentary, *Cypress Hill: Insane in the Brain*. When you look back, what are some of the defining moments from the group's history that embody what it means to be Cypress Hill?

B-REAL: Celebrating 30 years last year and 31 this year is surreal. We appreciate it most definitely. We've been able to stick around when most thought we weren't going to be around for only one or two

of the stories that took us through the time of us coming up to where we are now. And then also, this year releasing a new album... you don't expect that as a young artist. You're sort of just doing you right there in that moment. You're not thinking about 10, 20 years down the line. Unless you were groomed to do this shit and someone said you gotta think five, 10 years down the line, sort of carving it out in your head first. Unless you have someone who is educating you on how you look at this, you're sort of just going on in those moments, living it. You're not thinking about how long you're going to be around. You're fighting to stick around every fucking day of your career. Then 30 years go by and you're like, "Oh shit. We're still here."

It's fucking awesome, man, to be here 30 years later and still be doing sold-out shows and functioning at the highest levels—no pun intended. When we do these shows and really still bring it and are relevant in that arena. So it feels great to be celebrating 31 years of Cypress Hill and we're excited about the doc.

ERIC "BOBO" CORREA: Seeing the evolution [of Cypress Hill] in the doc kind of put things in perspective for me because we were just living in the moment. We weren't thinking of what was to come. We could say one day we hoped weed would be decriminalized, but we weren't thinking we'd be in this reality now still doing it.

When we did shows like *Saturday Night Live*, we never intended to disrupt anything, but we also wanted to show who we were and what we were about. I think people expect to see that—even now at our shows—a coming together of people.

So in a way, the undercurrent of the group is unity.

ERIC "BOBO" CORREA: In a way, yes. We consider ourselves brothers, a brotherhood. And smoking is about unity, smoking the peace pipe, coming together, and everything will be peaceful. It's always been about that, and in a way, it is unifying. 



whatnot is the person who comes up to me and says, "Hey, man. I don't smoke any marijuana, but I love Cypress Hill." When you make records from your soul, you touch other people, even if they're not on the same walk of life that you're on. You touch them enough where you're like, "Hey, I want to listen to this. It's got nothing to do with my life, but I want to listen to it." Somehow, people live vicariously through your songs into a scene they

years. Every album they were calling us "done" because they couldn't believe we had gotten on in the first place with what we were talking about. They thought we were lucky with the first album, and then the second album comes out and busts them in the face.

People kept counting us out, so to be here 30 years later with a documentary about the 30-something years of Cypress Hill and telling our story... some



“Back in Black is Cypress Hill returning to our roots. It’s a true hip-hop album. I know people are used to us mashing things up with other stuff, but not this time. We wanted to put together a traditional hip-hop album and prove to a lot of people that we still have the ability to do that kind of thing.”

- Sen Dog

SMOKING WITH THE HOMIES PAUL WALL & TERMANOLOGY



The Houston rap legend and East Coast underground hip-hop staple talk about their new album *Start 2 Finish* and what happened the first time The People's Champ smoked Satellite OG.

by Kyle Eustice

Paul Wall laughs easily—even through his customized silver grillz, a staple for the Houston-bred rap legend. His laid-back demeanor, approachability, and obvious humility have made him “The People’s Champ,” a rapper and entrepreneur who isn’t afraid to admit his shortcomings and deepest insecurities. It’s a refreshing quality, especially in hip-hop where bravado and ego often go hand-in-hand. So, the fact that he wound up collaborating with fellow rapper Termanology, aka “Term,” on their new album *Start 2 Finish* couldn’t be more fitting.

Term could be “The People’s Champ” on the East Coast. Equally as humble and always one joke away from breaking into a smile, the Massachusetts native has built a reputable name for himself in the underground hip-hop world, working with everyone from Wu-Tang Clan and Erykah Badu to Statik Selektah and Christina Aguilera. Together, the unlikely duo has delivered a Southern gumbo sprinkled with classic New York boom bap, effortlessly bridging the geographical gap between their two regions.

But today, Wall and Termanology are far from home in Los Angeles where they’re doing several events in support of *Start 2 Finish*, an album that was released on April 8, 2022 and came together rather organically over the course of a year. >>



“COVID happened and then with COVID happening, Paul hit me up like, ‘Hey man, send me something,’” Term says. “I’m in the studio. I’m hungry. I’m trying to rap.’ type vibes. So I sent him *Thailand* and he sent it right back, if I’m not mistaken, the same night or if not, within 24 hours. And I said, ‘Man, this dude is real. He’s humble. He’s a dope MC. He’s trying to get it popping.’ When he sent it back, he’s like, ‘Yo, you got something else? Send me something else.’ I’m like, ‘A’ight cool. I’m going to have two Paul Wall features on my album.’”

Those two features turned into three, then four and before they knew it, it was a full-blown album. Hopping on a Zoom call from their hotel room, they look happy to be surrounded by palm trees, the warm sun and Pacific Ocean—or it could be the good California weed they likely just smoked. Both artists are known cannabis connoisseurs and have been rapping about it since the onset of their careers. At this moment, they are filled with anticipation for people to finally hear their newest album.

“We’re excited,” Wall says through his



**“I SMOKE A LOT
OF BACKWOODS.
ACTUALLY, THAT’S
ALL I SMOKE IS
BACKWOODS.”
- PAUL WALL**

giant grin. “Everybody we let hear the project is deeply impressed, which makes us feel good because it lets us know, OK. We were on the right track with how we were feeling when we created the music, so we’re just so excited to get to share it with people. We’re excited for the other things that this is going to lead to. We are already talking about doing part two and who’s going to get on part two, that type thing.”

The thought is fleeting, as the conversation quickly turns to the topic at hand—weed. Paul Wall was 12 years old the first time he tried marijuana, and he admits it wasn’t exactly the most pleasant experience. As he explains, his biological father was a drug addict and the thought of turning out like him was a paralyzing prospect.

“I felt a lot of nausea, it being the first time smoking,” Wall recalls. “Like, ‘Am I going to throw up? Am I inhaling too much? Am I choking?’ I was a little paranoid. I remember walking through the door, and it wasn’t too late, but my parents were asleep, and I was afraid they was going to smell me. >>

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“It wasn’t a bad experience, but it also wasn’t a super good experience either. It was just something I always remembered. When I smoke weed now, it’s not like my first experience. I enjoy it a lot more.”

As for Termanology, he had a smoother introduction to weed smoking at 14 years old, right as he was really getting into making music.

“I used to do these demos in my boy Prophecy’s basement,” he says. “His dad was a big weed smoker, so he would always steal the weed out of the ashtray, the little roaches and shit.

“And so, I smoked. I started smoking with the homies and shit. I used to just get silly, just laughing, laughing, and laughing, getting the munchies; the classic stories.”

up again, go to sleep, repeat. It does go with the day. If I’m with the homies, then we might fuck around and light 20 up.”

That has happened numerous times during studio sessions with Wall. If they’re not paying attention, suddenly they’ve smoked 10 blunts between the two of them.

“I smoke a lot of Backwoods,” Wall says. “Actually, that’s all I smoke is Backwoods. So, when you have that leaf on there, there’s a tobacco buzz that’s added to it, but then it clogs you up. It’s a little dirtier of a smoke just because it’s the fertilizer sometimes still left on leaf, and the fact that it’s just a leaf as opposed to smoking it out of a bong, where it’s just straight weed.

“Also, man, there’s people that got high-concentrate bullshit, too. Just because it’s some wax or a dab don’t mean it’s fire or don’t mean it’s not going to give you a headache. I prefer smoking out the Backwoods, but I definitely dab a little bit.”

Wall doesn’t smoke weed at all times. If he has a packed

“MY MAN’S GOT THE MACHINE WHERE HE MAKES THE **PRE-ROLLS**, SO I JUST BUY THE PRE-ROLLS 100 AT A TIME.”

- Termanology



Naturally, life has drastically changed over the last 30 years. Both Wall and Term have children, established careers, and other responsibilities that force them to maneuver differently.

“I don’t smoke around my kids, so if I got my kids for the weekend or whatever the case, then I won’t smoke,” Term says. “But it’s not something that I need. I’m not one of those people that’s itching to burn. If I can’t burn, I’m not going to freak out. But I’d just rather be high, so I do like smoking.

“I’ll wake up, light up, go do my thing, hit the studio, light up again, go about my day, come home, take a shower, light

schedule, he might wait to puff until he’s checked off the boxes on his list. “Sometimes, I got a full day,” he explains. “And it’s like, ‘OK, I got to really focus on this or that, so let me just maybe not smoke, or maybe smoke just to get in the zone or whatever.’ Then sometimes it’s like, ‘We going to be smoking all day.’ But there’s some times where I’ll avoid smoking if it’s somewhere where I want to be clear headed.

“Other times, my mind will be foggy, and I need to smoke to clear my head. It just depends. I definitely smoke every day though.” >>



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QUITTIN' SIZZURP

Anyone familiar with Paul Wall's journey knows he's come a long way. As he often rapped about in his music, he made sippin' on sizzurp a second occupation. The drink—which is a concoction of cough syrup containing codeine and promethazine mixed with a carbonated soft drink—was often used as a recreational drug in the early 2000s, and it could have killed him.

"I used to sip syrup every single day, and we'd be in the studio every day smoking and drinking, smoking and drinking," he recalls. "But I didn't know how to roll up. So, I would just buy the drink and I'd pour it up, and they'd have some weed. I'd hit it every now and then when it would come my way. Then it got to be where I'm like, 'Hey, man. Roll it up.' I'm asking them to roll it up. Then it got to be where it's like, 'Shit, I got to learn how to roll it up. I got to roll my own.'"

Quitting syrup proved to be a pivotal point in his life. In 2010, he opted to have the gastric sleeve procedure, which reduced his stomach to the size of his thumb and eliminated the part that produces hormones causing hunger. He admits years of ingesting syrup, Xanax, and Vicodin, combined with diet pills severely impaired his metabolism.

"When I stopped sipping syrup on a daily basis, I had surgery on my stomach that saved my life and helped me lose weight," Wall says. "That's when I didn't have any appetite. I went from being 300 plus, 320, almost 350 pounds, to a 2Pac weight. I went down to 165. I literally don't get hungry no more. Now, if I go the whole day without eating, I'm going to have a headache and I'm going to be grumpy."

That's where weed comes in. He says he would sometimes go 12 hours without eating and once he'd smoke, the munchies would kick in and remind him to get back on track.

"We were raised to look at [weight loss surgery] as being a vain procedure or something," he says. "But that's not the case. This shit is something that saved my life and completely changed my life when I had that surgery. "But then, the results of when I lost all the weight was, I'm never hungry. Consciously, I'm like, 'OK, I definitely don't want nobody thinking I'm addict like that or I'm sick and about to die.' So, I had to gain a little weight. That's when the weed really helped me. That's when I started smoking daily."

Up until that point, Wall would only smoke at the studio or when he was partying with friends. But once he brought his eating issues to his physician, he was given a prescription for medical marijuana.

"When I had the surgery, I went to the doctor and the doctor said, 'Hey, man. I'm going to prescribe you some cannabis. It's going to give you your appetite, you going to be able to eat.' The next thing you know, I'm walking around here looking good now [laughs]."



THE MACHINE

Term, on the other hand, has always smoked for recreation. But the days of rolling his own joints or blunts are long gone.

"My man's got the machine where he makes the pre-rolls, so I just buy the pre-rolls 100 at a time," he says. "I got them at the crib. I grab one a day and I just smoke it. I'll have a few in the trunk of the car in case I'm in a party or session, or in case one of the homies want to smoke, I'll just pass him his own."

Being a well-known rapper doesn't hurt either. Any time he does a show, someone is bound to toss him a few nugs.

"I got this big chest in my house full of weed," he says. "A dude done gave me eight different flavors. People come to my house and they're like, 'What you got today?' It's funny, man. I really don't have to roll up anymore. I ain't rolled in a long time because I don't have to [laughs]."



FLYING HIGH

Wall and Term have decades of fond memories from their weed-smoking adventures. Term will never forget going toe-to-toe with cannabis king B-Real of Cypress Hill, while Wall will always remember his first experience with Satellite OG.

"We were in the studio in L.A., me and a couple of my boys, and we were just smoking some good-ass weed," Wall says. "All of a sudden, my boy rolls up with Satellite OG. I hit it and immediately was like, 'Whoa, what is this? Is this like a sherm stick or something? It's some wet in there? What's going on?' He's like, 'Nah, it's just that Satellite OG,' and I'm like, 'Damn, this shit is weed?!' It wasn't even concentrate, wax, kief, none of that—it was just straight weed."

The *Sittin' Sideways* rapper only hit it a couple of times and had to book it to Los Angeles International Airport shortly after—but he was in an entirely different world. "I'm just looking out the window on another level," he continues. "I remember some music coming on the radio, and I remember telling my boy, 'Oh, yeah, yeah. This that new Mary J. Blige, ain't it?' He like, 'What?! That's Ne-Yo!' I was just tripping out of my mind."

By the time he got to the TSA line, he couldn't figure out how to get his identification card into the machine, and paranoia quickly set in. "I remember trying to get it in the hole and it wouldn't fit in the hole," he says with a chuckle. "I'm like, 'Shit!' This is '05, so everybody's staring at me, and I'm like, 'Shit, is everybody staring at me because they like, 'Oh, there go Paul Wall,' or everybody's staring at me because they like, 'That dude high as fuck.' I'm just trying to keep my composure to get on the flight because keep in mind too, in Texas, they catch you high, they taking you to jail."

Asked if he ever smoked Satellite OG again, he replies without hesitation, "Every day." **HT**

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ADULTS



DIY WEED GUMMIES

Monica Lo's
cookbook offers
home recipes for one
of America's most
popular edibles.

by Keegan Williams

AS THE CANNABIS INDUSTRY CONTINUES TO rapidly evolve, many cannabis professionals end up embracing associations with the coveted plant as a career due to the impact it's had on their wellness journeys. This rings true for multidisciplinary creative director, author, and cannabis cook Monica Lo, who will release her new cannabis cookbook, *The Weed Gummies Cookbook: Recipes for Cannabis Candies, THC and CBD Edibles, and More* on Aug. 30.

Lo dabbled with cannabis in college, but her journey with the botanical shifted in 2015, when she suffered a herniated spinal disk during a high-intensity boot camp workout. Mirroring the myriad

sentiments from people working to treat their pain, Lo recalled the prescribed mixture of opioids and acetaminophen that “wrecked” her stomach and made her situation “so much worse.”

At her wit's end, she said she tried an edible given to her by her roommate and slept like a log. From that day forward, she knew she had to figure out how to make her own cannabis-infused edibles.

“Since we lived in a strict no-smoking building, I needed to be discreet about the wafting scent of cannabis,” Lo said. “This meant I had to rule out the Crockpot method or cooking on the stovetop. At the time, I was a creative director of a sous vide startup and thought I'd put our machines to the test—and it worked!”

Sous vide, which means “under vacuum” in French, is a method of cooking that involves vacuum-sealing food in a bag, then cooking it to a precise temperature in a water bath.

Using this process, Lo seals cannabis and cooking oil in an airtight bag and places it underwater to create infusions. Infusing the oil in this way prevented the presence of that tell-tale cannabis smell and allowed Lo to use the infused oil as a base to make multiple cannabis dishes at once.

Creating her own edibles allowed Lo to manage her pain and launch her blog, *Sous Weed*, where she began documenting her experiences and collaborating with others in the industry, such as farmers, cannabis entrepreneurs, chefs, and edible makers.

Regarding her cookbook's focus on sweets, Lo referenced the impact of the pandemic on medical and recreational edible consumption. Now more than ever, consumers are choosing edibles (largely gummies and candies) over inhalable cannabis.

A report generated by data-analytics firm Headset shows that sales of edibles have continued to grow in popularity, with gummies dominating the 2021 marketplace in California, Colorado, Michigan, Nevada, Oregon, and Washington state. >>

“It’s far more cost-effective to make your own infusions and treats at home, especially as dispensary prices are on the rise,” Lo said. “Edibles are a low barrier to entry—everyone eats, and who doesn’t love sweets? Dispensary edibles often have preservatives to extend their shelf life. When you DIY, you can make your edibles without the commercial preservatives and also customize the dosage to your body’s needs.”

Lo’s publishers fully supported her creative vision. In addition to writing the book, Lo designed it herself and shot all of the food photography. The recipes draw upon classic, nostalgic flavors, including a few inspirations drawn from her Asian-American heritage.

“It’s far more cost-effective to make your own infusions and treats at home, especially as dispensary prices are on the rise.”

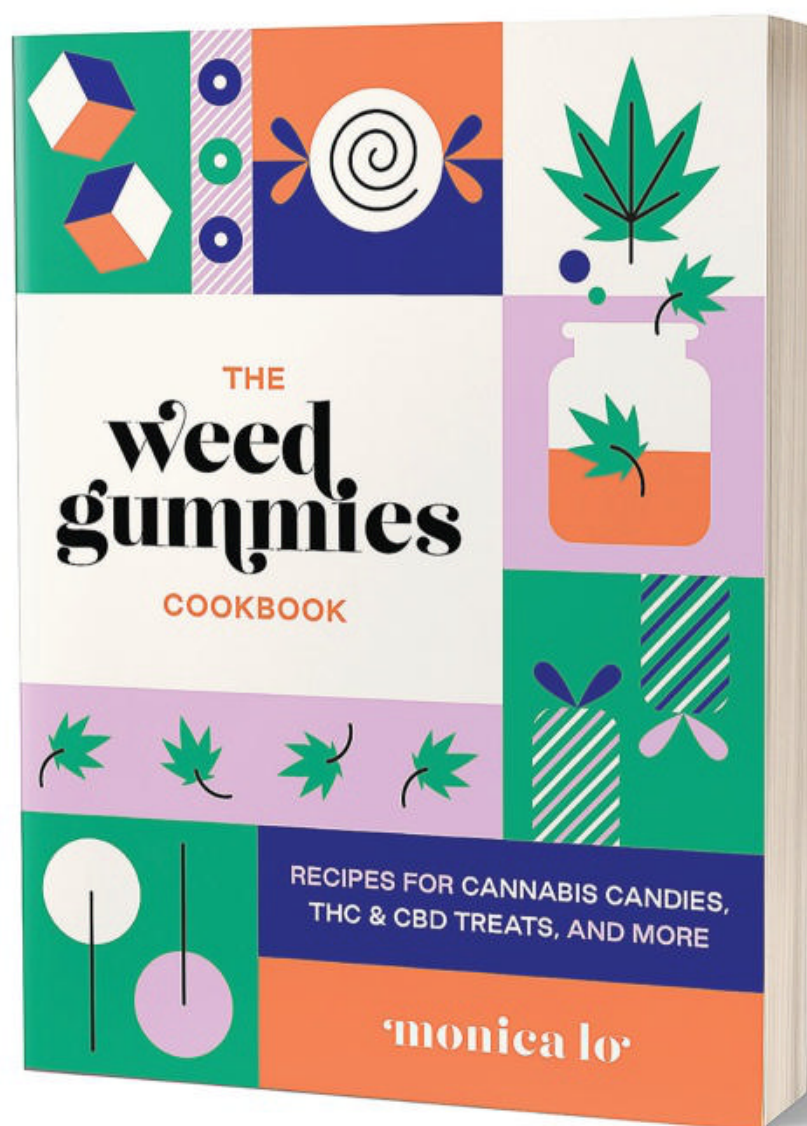
- Monica Lo

“I was pregnant when I signed the book deal, and I delivered the manuscript the same week I delivered my son,” Lo said. “It truly was a labor of love.”

Lo recognizes that many consumers are interested in learning more about cannabis-infused cooking, but might feel intimidated. She points out that many recipes in the cookbook don’t require special equipment—and her alcohol-based cannabis tinctures don’t require cooking at all.

“*The Weed Gummies Cookbook* is made to be accessible for all levels, and the book is set up by different types of confections. Gummies are by far the easiest; hard candies and brittles require more practice to perfect,” she said.

While many folks might opt to head to their nearest dispensary for edibles, Lo points to the many advantages of cooking at home, aside from saving a bit of cash. Novice home cooks creating their own edibles can control their dose and go beyond dosage limits enforced in dispensaries. Cooking at home also allows people to get strain-specific by using their favorite flower rather than being limited to what the dispensary has in stock, and the options open up immensely.



“Plus, it’s always nice to gift homemade cannabis treats for special occasions and holidays,” Lo said.

Cooking with cannabis also comes with additional considerations, like childproofing and safety labeling, but Lo has that covered in her new cookbook too, with an additional section for educational resources. This section encourages readers to shop responsibly and support BIPOC cannabis brands and organizations.

“I think it’s so important for us to understand the history of cannabis, not just the origins but also how communities of color in the U.S. have been disproportionately harmed by the War on Drugs,” Lo said. “There are far too many people still incarcerated for nonviolent cannabis offenses while so many others are building immense wealth off this plant.”

Lo will also donate a portion of *The Weed Gummies Cookbook* proceeds to the Last Prisoner Project, an organization dedicated to cannabis criminal justice reform.

As a special treat for *High Times*, Lo shared the cookbook’s recipe for gemstone gummies, based on a Japanese rock candy called *kohakutou*.

“It’s a stunning-looking treat with a crunchy exterior and gummy center,” Lo said. “You can really have fun and get artsy by swirling around your favorite colors. Once the gummy is cured, it will form a crystallized crust and look like a gemstone.” HT



sousweed.com



PHOTO: MONICA LO



**MAKES
32 PIECES**

Equipment:

8-inch square baking pan

Fine-mesh strainer

Toothpicks

Disposable gloves

Ingredients:

3 cups granulated sugar

6 teaspoons agar-agar powder

2 cups cold water

1/4 cup cannabis-infused sugar*

1/2 teaspoon super-strength candy
flavoring of your choice

Food coloring of your choice

GEMSTONE GUMMIES

Directions:

1. Line an 8-inch square baking pan with a sheet of parchment paper. Crease the corners along the inside edges and leave a 1-inch overhang on each side of the pan. Lightly coat with nonstick spray.

2. Add the granulated sugar, agar-agar powder, and water to a medium saucepan and stir with a silicone spatula to combine.

3. Turn the heat to medium and bring to a boil. Lower the heat and simmer for 8 minutes to activate the agar-agar and thicken the mixture, stirring often. Remove from the heat and add the cannabis-infused sugar and your candy flavoring of choice, stirring until the sugar has dissolved into the mixture.

4. Pour the mixture through a fine-mesh strainer into the prepared baking pan. Using toothpicks dipped in food coloring, make colorful swirls in the mixture while still warm. Transfer to the fridge to cool until firm, 1 to 2 hours.

5. Remove from the pan by pulling on the parchment paper. Slice the slab into eight 1-inch strips. Wearing disposable gloves, roughly rip the gummies into 1 x 2-inch pieces and place onto a parchment paper-lined baking sheet.

6. Allow to dry in the open air at room temperature for two to four days, rotating sides each day, until a hard sugar crust has crystallized on the exterior. Store in an airtight container or candy bags for up to a month.

*The cannabis-infused sugar recipe can be found in *The Weed Gummies Cookbook* by Monica Lo. Pre-order available anywhere books are sold.

Excerpted from *The Weed Gummies Cookbook* by Monica Lo, courtesy of Ulysses Press.



NEW JERSEY KICKS OFF ADULT-USE CANNABIS SALES

Adults in the Garden State can buy 1 ounce per transaction and possess up to 6 ounces of flower.

by Benjamin M. Adams

NEW JERSEY JOINED THE GROWING LIST OF STATES THAT ALLOW adult-use sales of cannabis as the industry on the East Coast continues to mature and excitement rises.

Adult-use cannabis sales launched in New Jersey on April 21, one day after the big 420 holiday. The inconvenient start date was a deliberate move by regulators to avoid potential chaos and long lines on opening day. Local media coverage showed long lines of customers before dawn on the first day of sales.

Adults ages 21 and over can buy up to 1 ounce of flower or up to 5 grams of concentrate or 1,000 mg total of ingestible items per transaction. While adult New Jerseyans can only purchase an ounce at a time, they are allowed to possess up to 6 ounces total.

Baked edibles such as brownies will not be allowed.

It's taken several years to get to this point on the road to legalization for recreational purposes. Gov. Phil Murphy campaigned on legalizing adult-use cannabis in 2017, and voters in New Jersey approved a referendum in 2020—the same day voters in Arizona and Montana legalized adult-use sales (as well as South Dakota's rescinded bill). The governor signed the New Jersey Cannabis Regulatory, Enforcement Assistance, and Marketplace Modernization Act into law in February 2021.

While addressing state troopers in the township of Ewing on April 18, Gov. Murphy joked that while he would not be consuming any cannabis on the first day of adult-use sales, it might be a different story if people were celebrating scotch.

Under the legislation, a 6.625% sales tax was imposed, and the plan is to allocate 70% of tax revenue toward areas disproportionately affected by the War on Drugs. Local cities and towns can also impose an additional tax of up to 2%.

Since medical cannabis dispensaries or alternative treatment centers are already in operation, they were the first to open doors. The limited number of them is part of the reason why opening day presented some logistical problems.

As of late April, New Jersey's Cannabis Regulatory Commission (CRC) approved the applications of seven medical cannabis dispensary chains operating alternative treatment centers to sell adult-use cannabis at 13 locations. Of those 13 stores, 12 are open for business. More existing medical cannabis businesses are expected to be added to the list. >>

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A bottleneck effect due to long lines at dispensaries was inevitable. That's only 12 dispensaries open that serve a state of around nine million people. In addition, a large number of Philadelphia residents nearby in Pennsylvania are expected to shop for cannabis in New Jersey.

The CRC listed the seven chains—Apothecarium, Ascend Wellness, RISE, Zen Leaf, The Botanist, The Cannabist/Columbia Care, and Curaleaf—with most operating more than one location. Some of the licenses are held by large companies; The RISE shops are owned by Green Thumb Industries, while Acreage Holdings owns the Botanist shops.

An earlier August 2021 deadline came and went as delays stacked up. Now begins the real test as adult-use operations open up and regulations start to be enforced.

The new market provides new opportunities. NewLake Capital Partners provides real estate capital to state-licensed cannabis operators through sale-leaseback transactions and third-party purchases and provides funding for build-to-suit projects, with a portfolio including Columbia Care and Grassroots, which is now Curaleaf.

“A strict and thorough focus on compliance is critical for long-term success in any cannabis market, but particularly in a fledgling adult-use market such as New Jersey,” CIO of NewLake Capital Partners Anthony Coniglio told *High Times*. “Given the highly attractive long-term opportunity for NJ licensees, a slow and careful approach is the best way to realize that opportunity versus moving fast, taking risk, and having a misstep with state regulators.”

Supply and demand issues often are coupled with tax problems. But despite the red flags seen in other states, trade organizations in New Jersey mainly were optimistic, taking heed of common problems seen in other state cannabis markets.

“This historic day was a long time coming. Decriminalizing and legalizing cannabis, while also working to establish the foundation of an adult-use recreational market, is a very complex process, and the NJCTA applauds those who were instrumental in ultimately making today happen,” The New Jersey Cannabis Trade Organization (NJCTA) stated.

The CRC, on the other hand, encouraged consumers to be safe despite the newfound freedoms. Some speculated whether more people would be consuming cannabis now that it's legal.

“We encourage everyone to be safe by buying only from licensed dispensaries and by starting low and going slow—especially those who are new to cannabis or who haven't consumed cannabis in a long time,” stated CRC Executive Director Jeff Brown. “Also, remember that the laws against impaired driving apply to being high. Our guests from neighboring states should remember it is illegal to transport cannabis across state lines.”

Operators in the legal market hope that the limited number of dispensaries doesn't cause enough problems to drive people back into the black market, but it's too early to tell. **HT**

HIGH FIVE

FIVE BASIC BHO STYLES

BHO, or butane hash oil, is a potent form of cannabis concentrate that comes in various forms.

by Benjamin M. Adams

1 ➤

SHATTER

Shatter is crystallized and translucent and golden to orange in color. It's very commonly found and is one of the most popular forms of BHO concentrate. Shatter should be glass-like and break when bent. If the concentrate is slightly softer, bending and snapping, it's considered pull 'n' snap, and has a consistency like taffy. Being very hard, it is relatively easy to handle, and all you need for a dab is a small pinch. Avoid shatter if it is cloudy or still smells like butane.

2 ➤

BUDDER

As explained in the book *Beyond Buds Next Generation* by Ed Rosenthal and Greg Zeman, when shatter turns from clear to opaque it goes through a process called nucleation or “buddering.” A magical combination of optimal heat and air pressure are the key for producing a batch of good quality budder. Budder ranges from opaque yellow to beige, and its texture is like cake batter or butter. Budder and batter are other alternative names, and it shouldn't be confused with cannabutter, which is less potent and used as a cooking ingredient.

3 ➤

CRUMBLE

Crumble is opaque and often holey. Its consistency is crumbly and it breaks up like a hard cheese. Crumble is sometimes called honeycomb at the

right consistency. Crumble is made by purging butane at a low temperature for a longer period than other forms of BHO extraction. Flat end dab tools are usually recommended for dabbing crumble. Good BHO crumble should remain stable at room temperature. As with most other forms of concentrate, good crumble should also taste like the original flower it was made from.

4 ➤

LIVE RESIN

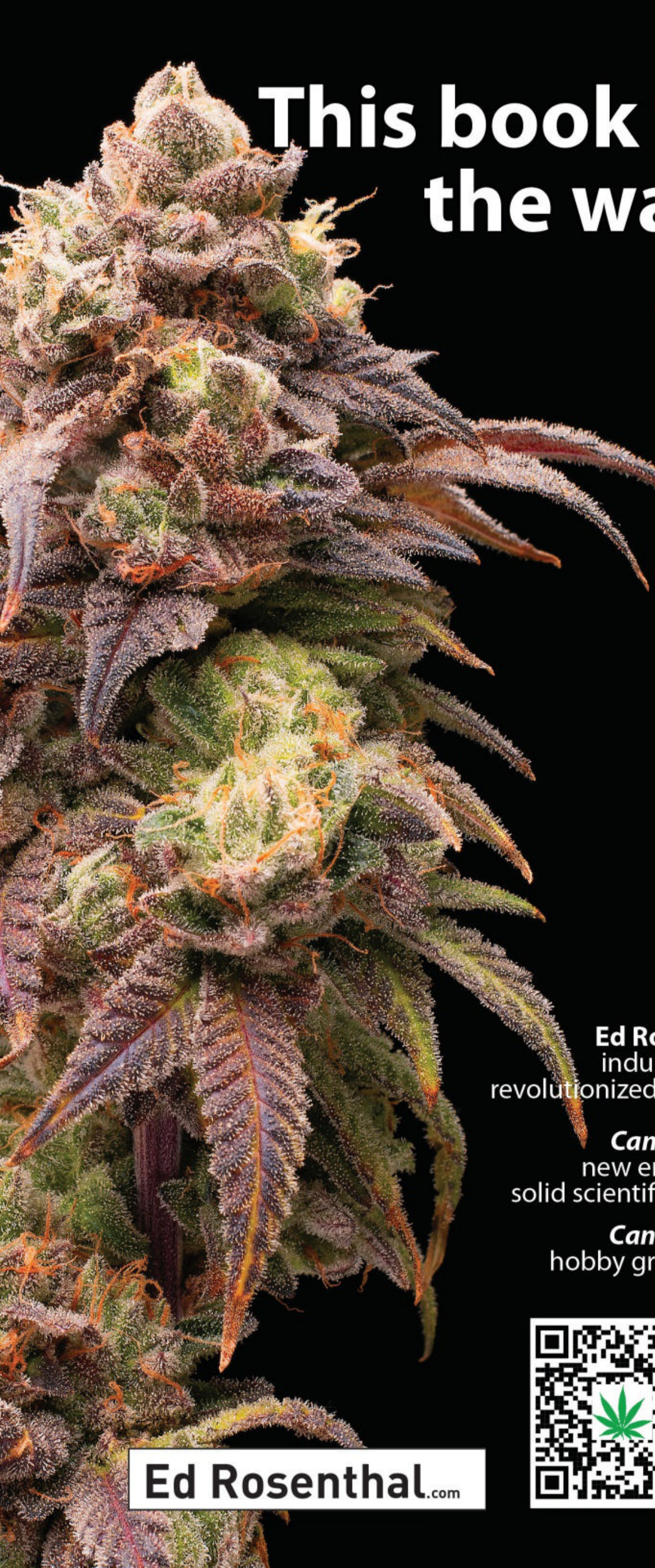
Live resin is a concentrate that is crafted from “live” or fresh frozen material. Flower is immediately exposed to temperatures below the freezing point, which in turn helps preserve delicate terpenes and cannabinoids. It takes on a variety of forms depending on how it is processed. Some connoisseurs consider live resin to be the most refined concentrate type. Good live resin should look light yellow to gold in color.

5 ➤

OIL

A sizable chunk of cannabis concentrates are oils or begin as an oil, with a honey-like consistency. Oils are commonly found in vape carts as their consistency is easy to work with in this delivery method. Sap, a more sticky consistency, is fairly similar but less runny. Dating back to the 1960s, crude forms of oil such as honey oil were available. Today, illicit butane hash oil production can be dangerous and many places have launched efforts to implement harsher punishments for its production.

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A FRIENDLY SPOOF

Actor and comedian Adam Devine, who has appeared in numerous films and TV shows such as *Workaholics*, was recently involved in an advertisement for cannabis-infused beverage maker Cann. The ad shows Devine and his “co-star,” a talking can of the brand’s newest beverage flavor Blue Rhuberry, in a spoof of the sitcom *Friends* called *Cann We Be Friends?* “Results may vary. In your mind,” Devine says directly into the camera, followed with a cheeky whisper, “because there’s weed in it.” Devine is one of many celebrities who are a part of the Cann team. “As a longtime investor in weed and Cann, I’m excited to partner with them on two new beverages—one with cannabis, and one without the fun,” Devine said in a press statement. “I often refer to myself as a ’50s dad, but instead of pouring a glass of scotch, I crack open a Cann. I can’t wait to get you all high—or not—with Blue Rhuberry.”



“I USED
TO SELL
WEED.”



ONE OF US

Actor Idris Elba was recently a guest on *The Jess Cagle Show* on Sirius XM in April and while promoting *Sonic the Hedgehog 2* on the show he said that cannabis helped him pay his bills early in his career. He shared that selling weed was just one of many side gigs he embraced in order to get by after he moved to the U.S. from England. “I used to sell weed,” Elba said on *The Jess Cagle Show*. “I did that for a little bit just to, you know, help pay the way.” Elba also listed that he was a DJ and a doorman at Caroline’s Comedy Club in New York, the latter of which is how he connected with a fellow comedian with weed. “David Chappelle remembers me ‘cause he used to buy weed from me. Anyway, moving on. But yeah, I did all kinds of things, to be honest,” he said.

PHOTOS: SHUTTERSTOCK



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HEMP RULES!

The Foundation for Food & Agriculture Research (FFAR) announced on March 15 that it will donate \$2.5 million to the Hemp Research Consortium, which coordinates “research-intensive and land grant universities with industry participants,” according to the organization’s website. Consortium’s members (which includes Oregon CBD, International Hemp, and The Scotts Company, among others) are matching funds with Consortium member institutions (such as Cornell University, North Carolina State University, and University of Kentucky). According to Consortium Director Dr. David Suchoff, who is also an assistant professor at North Carolina State University, these funds will be essential to help progress the future of hemp industry research. “Hemp is an incredibly versatile crop with significant potential,” said Suchoff. “The Hemp Research Consortium aims to conduct highly collaborative, transdisciplinary research that leverages the technical and intellectual resources across the academic and industry partners. In doing so, we will be able to address many of the challenges faced by this industry and help to accelerate it forward.”

CBD WORKS. PERIOD

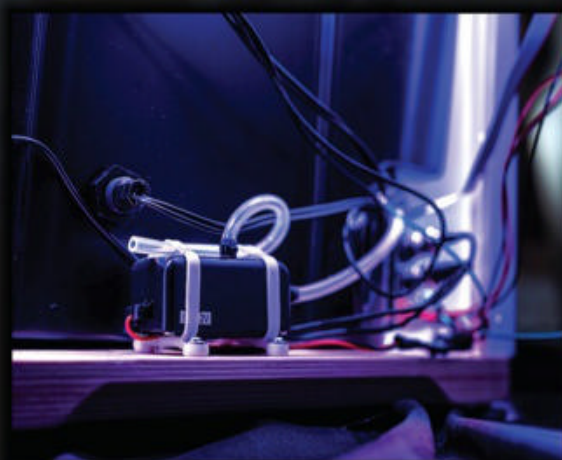
Results from a study conducted by Canada-based Canopy Growth Corp. which examined how CBD can be an effective way to treat menstrual-related symptoms were shared on March 22. Forty participants were given either 160 mg or 320 mg of CBD to consume twice daily for five days per month, over the course of six months. Researchers found that the higher dose was more effective in the reduction of irritability and stress in participants. Canopy Growth’s Vice President of Human & Animal Research Dr. Marcel O. Bonn-Miller shared in a press release that this study will be the foundation for many more research efforts that will explore cannabis as a menstrual symptom treatment. “Our findings showed that CBD improves a variety of physical and psychological symptoms associated with menstruation and can be consumed in a targeted way around an individual’s menstrual cycle,” said Bonn-Miller. “Studies have shown that individuals report using cannabis to help manage their menstrual-related symptoms—however no study had been conducted that examined the efficacy of cannabinoids in this area.”



OUT IN THE OUTBACK

The Australian Criminal Intelligence Commission (ACIC) released its National Wastewater Drug Monitoring Program report on March 15. The government-funded effort analyzes wastewater in select areas to better understand drug consumption levels throughout Australia. The data was obtained in August 2021 from 58 monitored wastewater sites which cover approximately 57% of the Australian population. “When comparing data for April and August 2021, the population-weighted average consumption of cannabis increased in both capital city and regional sites to the highest levels recorded by the [National Wastewater Drug Monitoring] Program. Average capital city cannabis consumption then decreased from August to October 2021. Average regional cannabis consumption continued to exceed average capital city consumption. In August 2021, the Northern Territory had the highest estimated average capital city and regional consumption of cannabis,” the report stated in its conclusion. On a larger scale that included other substances, the ACIC shared that alcohol, nicotine, methylamphetamine, cocaine, MDMA, MDA, fentanyl, and ketamine averages in capital cities decreased overall, while heroin and cannabis consumption increased.

**Cannabis is a powerful tool for social change.
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TICK, TOCK, THAILAND

A 70-year-old woman named Maha Sena, and her 48-year-old relative, Boonseng Singhern, living in northeast Thailand were arrested for growing two cannabis plants in March and were initially denied bail. Sena's son, who is a lawyer, allegedly spoke with police about bail but police refused to speak to him. Only after 24 hours were Sena and Singhern granted bail at \$10,000 baht each (about \$296 USD). "I was just growing marijuana for medicinal purposes and ended up arrested and at the police station," said Sena, according to local newspaper *Thairath*. "Then, they wouldn't let me out on bail. I ask for justice for all involved." Sena shared that she boils cannabis leaves and drinks them in a tea to treat her ailments. Thailand legalized medical cannabis in 2018, and as of Feb. 8, 2022, the government took a positive step forward toward decriminalization by removing cannabis from its list of controlled substances. However, an *AP News* report shared that it would be 120 days before it took effect, which didn't officially happen until June.

CROATIAN EDUCATION

According to a report from *AFP News Agency*, Cannabis Museum Zagreb is Croatia's first cannabis museum, which opened earlier this year. Museum Founder Tvrtko Kracun explained the many reasons why he decided to open the museum. "The plant is present throughout human history, in practically all civilizations, and it has a lot of benefits, from universal use, fuel, textile, and other things too. And notably in medicinal use." The museum encompasses a vast amount of information about cannabis through in-depth posters, video demonstrations, exhibits, and a live plant to view up close. *AFP* also reports that the admission ticket to enter the museum can be used to roll and smoke as a joint, and visitors can purchase various CBD products in the lobby at the end of their visit. In a September 2021 interview with *Total Croatia News* prior to the museum's opening, Kracun explained that the museum's goal is to educate everyone about cannabis, which includes free entry for "employees of the Ministry of Health, the Ministry of Economy, the Ministry of Agriculture, and the Ministry of the Interior."

CANNABIS IN CODA

The Oscars were quite the event this year, but drama aside, it was a great year for one particular cannabis-related role. Troy Kotsur, a deaf actor who played a cannabis-consuming fisherman named Frank Rossi in *CODA*, won the Academy Award for Actor in a Supporting Role (*CODA* also won two Academy Awards for Best Picture and Writing). The film is about a mostly deaf family, with the exception of a daughter named Ruby who is not deaf, and is interested in a career in singing. Her dad, Frank, smokes a joint on a dock in one scene, in which Ruby responds by signing, "We're in public!" Frank plainly responds: "It's medical." Ruby retorts with, "I don't think being deaf makes it legal to spark a fatty." In his acceptance speech, Kotsur dedicates the Academy Award win to "the deaf community, the *CODA* community, and the disabled community. This is our moment. I won."





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\$40

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The **daab by Ispire** is quality you can feel, from the weight and thickness of the borosilicate water chamber and carrier cup to the daab's device base, which also feels solid. Ispire provides a few solutions to common dabbing problems such as an "all-glass pathway" to avoid clogging, lower temps down to 250° F, and strong magnetic sections that decrease breaks. We clicked the "fire" button five times to turn it on, selected the temp and waited until the flashing gold light turned solid to hit it. The water chamber pleasantly bubbled as our Banana MAC sugar wax melted, and the hit tasted great—terps and all intact. It's great for cold start dabs as well; just put a tiny blob in the cup before heating to max out the flavor. The heavy duty military-like carrying case was also a nice touch.

\$299



COFFEE BREAK

puffco.com

Every person who saw us smoke out of the **Cupsy** laughed instantly. There's a lot of buzz about Puffco's latest novelty pipe, which is stealthy like many old school stoner devices. It looks like a coffee cup, but a mouthpiece flips out on the lid to reveal a bubbler pipe. Pure genius! Puffco representatives said that the magic is all under the lid, and the cup itself isn't the most important part. The lid fits most coffee cups, so you can smoke, right out of your favorite travel mug. Just remember to pull out the ceramic bowl and insert it into the other hole to hit the sneak-a-toke correctly, in one quick step. Store it in your car's cup holder and no one will know it's for smoking when the mouthpiece on the lid is closed.

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tribeforlife.com

You can buy live rosin in the shape of a brontosaurus or plenty of other fun animal shapes! How dope is that?! Oklahoma-based Tribe released **Hashimals**, solventless-focused live rosin hash in the shape of animals. The original and XL sizes of live rosin hash range from 0.5 to 5 grams, in the shapes of animals such as a lion, monkey, bear, dinosaur, dolphin, octopus, and starfish. Once the rosin is pressed, it is formed into delicate and uniform shapes. All rosin should be stored in temperature-controlled storage areas, especially in this case, so your animals don't melt away. They are currently available in the Oklahoma market.

Prices Vary



THE THERAPEUTIC USES OF WEED



When are physicians going to get a clue about weed?

-Shirley Knott

As soon as we educate them! Feel free to bring articles to your

appointments. Physicians don't recommend medical cannabis very often (yet!), but attitudes about legalization have improved. Several medical schools are devoting lectures to medicinal cannabis use as well.

My mom got sober using CBD. Spread the word!

-Princess MJ

Always glad to hear about successes, but please be careful generalizing from a single case. Data does suggest that some whopping doses of CBD can lower the rewarding effects of opiates and stimulants. One trial with cigarettes also looks very promising. Given the low toxicity, people have little to lose by giving it a try. Nevertheless, I'm sure your mom put in a ton of effort in a lot of other ways, too.

An ayahuasca fan I know claims that a small edible minimizes nausea and enhances the work. Any research to support the ideas?

-Chuck Cookies

Psychedelics are not for everyone; I can't recommend them for home use. Antinausea effects of cannabis are well documented. One correlational

study suggests that cannabis might create more of the mystical experiences, but not more of the "emotional breakthrough" effects of psychedelics. My lab even has two papers showing that people report cannabis can create mystical effects on its own.

Has cannabis legalization helped decrease alcohol consumption?

-Paul EZ Wonk

Yes, but also no—and cannabis legalization did not affect alcohol consumption in a couple of places, too. This research is still inconclusive, but I hold out a lot of hope. Some studies showed that changes in policy didn't even change the use of cannabis, so it couldn't have had much effect on booze. I think we'll know a lot more in the years ahead, but data suggests that lowering alcohol consumption is always a good move. **HT**



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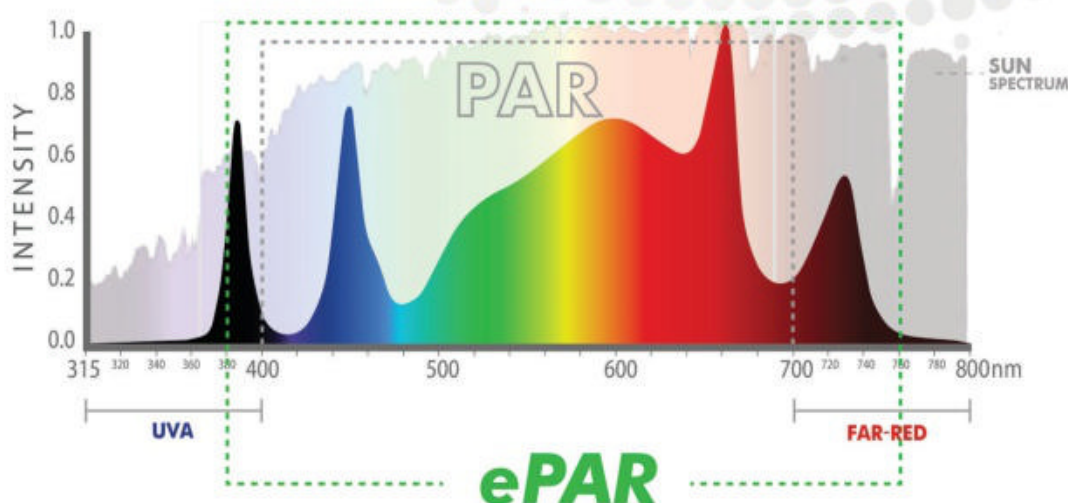
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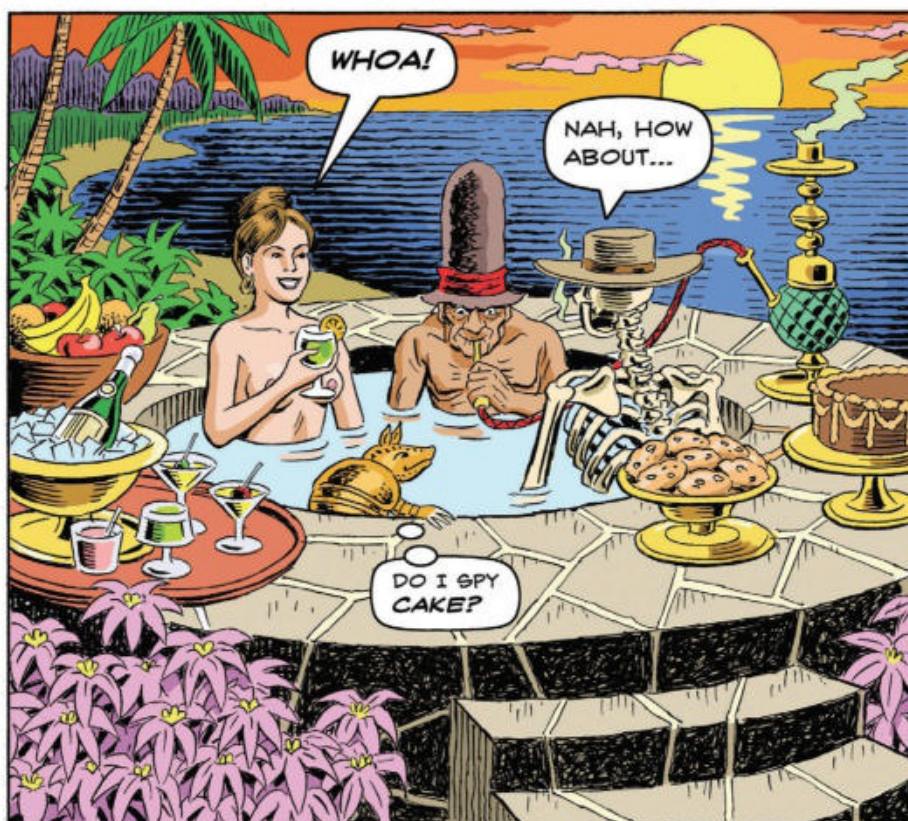
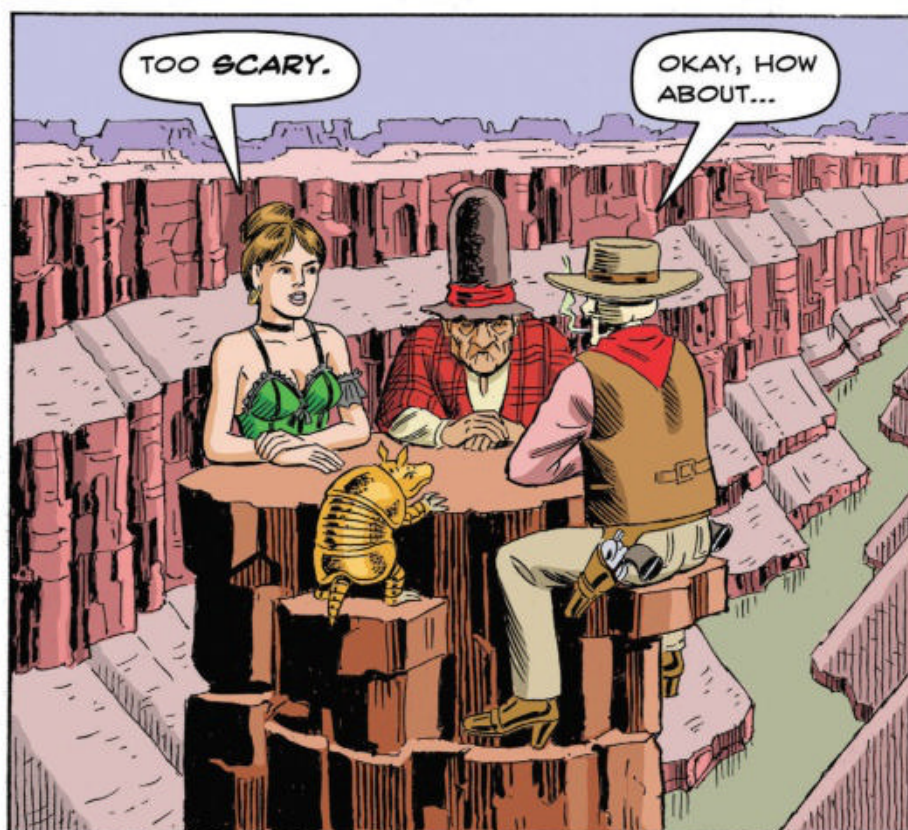
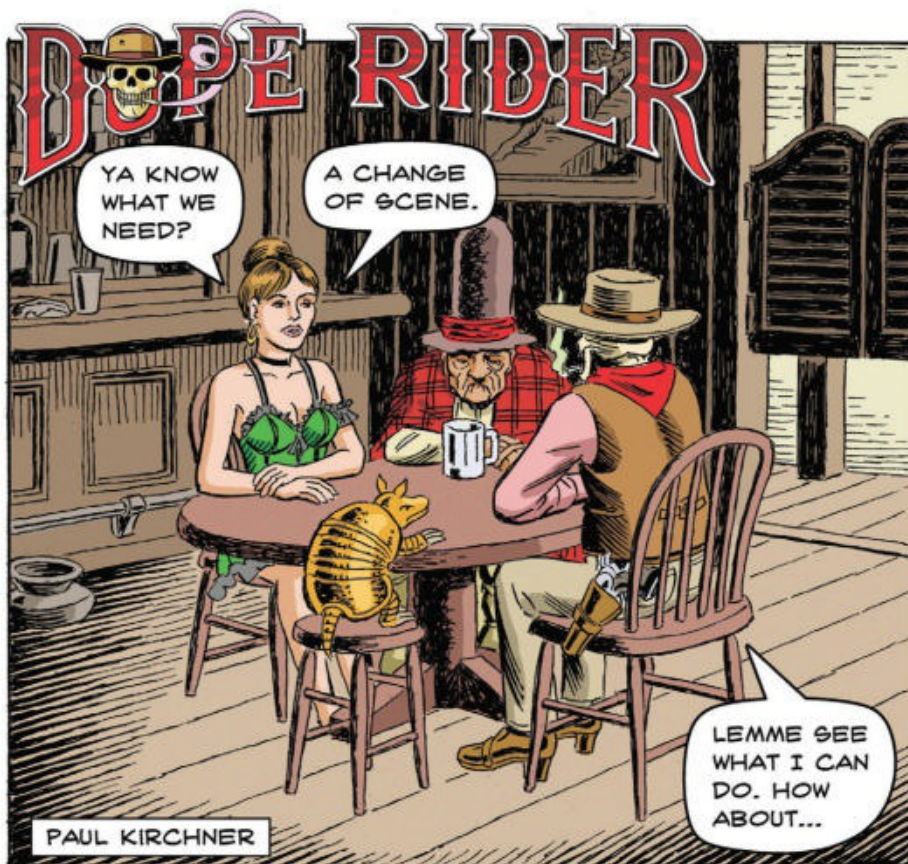


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